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LECTURES

ON

HUMAN EMBRYOLOGY,

ILLUSTRATED BY COMPARATIVE ANATOMY.

Delivered at the Jardin des Plantes, Paris, 1835.

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LECTURE V.

THE PENIS IN MAN.

GENTLEMEN,—In the former lectures we have spoken of the different membranes which, in man, constitute the canal of the urethra, but we have not yet had occasion to speak of the spongy body, to the nature of which we now propose to direct your attention. Properly speaking, this spongy portion is the only part of the urethra which enters into the composition of the penis; it is situated in a kind of canal or groove placed in the inferior surface of the corpora cavernosa, with which bodies it has the greatest possible analogy; it commences by an enlargement, divided into two portions, by a kind of depression, into two lateral moieties, and separated by a kind of cloison: at a little distance from the bulb it begins to diminish, and following the traject of the urethra it preserves nearly the same volume until it has arrived at the anterior extremity of the penis, where it again acquires a more considerable volume, and constitutes the gland. When we shall have described the cavernous tissue of the penis, we will resume the spongy tissue, and examine the erectile tissue of which it is specially composed; we shall, at the same time, consider the question whether the erectile tissue, as some anatomists pretend, is actually composed of a tissue peculiar to it, and situate between the arterial and venous systems; we shall, at the same time, speak of the phenomenon of erection and its causes.

These are the parts composing the excretory canal of the urine and the semen, situated, as we have already said, at the inferior part of the penis; however, considering its uses, we must class it amongst the excretory organs, and will reserve the name of copulative apparatus to the penis, and to it alone. We have now to speak of the penis, an organ so variously formed in the animal scale. We shall first describe it in man, and wherever comparative anatomy may be likely to throw any light on that of man, we shall not fail to have recourse to its assistance. The penis is the organ constituting the copulative apparatus in the mammalia; its inferior portion encloses a canal which we have already described to you, the canal of the urethra. In the higher class of animals it is always single, and composed of a fibro-vascular body called "the cavernous," of an internal bone (in the greater part of the rodentia), of the spongy tissue, the glans, and certain muscles, which, by their action, assist in the excretion of the semen. Like all other organs endowed with vitality, the penis is provided with its peculiar vessels and nerves. We shall take up each of these several parts in their turn, and give you as brief a description as is consistent with clearness.

The *corpora cavernosa*. Anatomists have given this name to two membranous bodies, composed internally of a tissue called erectile; they are of a cylindrical form, and lined by a peculiar membrane whose structure and uses we shall presently describe. The corpora cavernosa form by far the greater portion of the penis, and we may mention beforehand that in the whole series of mammalia, extensive as it is (except however those species in whom the os penis concurs in the act of copulation), in the whole series, I say, these bodies enjoy the property of becoming engorged with blood, a disposition which gives the organ of copulation a degree of consistence commensurate with the function it is called upon to fulfil; for, as we hope to prove in the course of these lectures, in the most positive manner, the immediate contact of the semen with the ovum is indispensably necessary for fecundation.

Let us now speak of the anatomy of the corpora cavernosa; these two tubes are united laterally along a great part of the penis, but as they approach the bones of the pelvis they separate gradually, and each passes to attach itself to the corresponding branch of the ischium a little above the tuberosities: at this point the cavernous bodies furnish two roots, about a couple of inches in length, which terminate in pointed prolongations, adhering strongly to the bones just named, and whose internal parietes seem to be confounded with the periosteum. Such is the traject, gentlemen, of the corpora cavernosa; but if we now follow them from behind forwards, we shall find that the two roots, when arrived at the symphysis pubis, become applied one against the other, and in some measure united, so as to form a single body of a cylindrical form in its whole course, divided inferiorly by a species of groove for the canal of the urethra, and above marked by a depressed line, in which is lodged the dorsal vein of the penis; at its anterior extremity the corpus cavernosum ends in a blunt rounded point, which is attached to the posterior surface of the enlargement of the spongy body called the glans penis. This is perhaps the proper occasion to describe the external membrane which encloses the erectile tissues, after which we will speak as briefly as possible of its structure and different uses.

This external membrane, resembling in all points the fibrous tissues, is the one which gives the corpus cavernosum the determinate form we have assigned to it. It is whitish, extremely firm, and pretty thick; its internal surface adheres strongly to the erectile tissue, and sends into the interior of this tissue a great number of prolongations, which interlace in all directions, and, according to the idea of some anatomists, constitute the essential nature of the erectile tissue, by furnishing a vast number of cells communicating with one another; however this may be, it is certain that fibres resembling membranous bands are given off from the internal surface of the lining membrane itself, and seem to guarantee the structure of the body against the danger of too great distention during the act of copulation, or whenever the flow of blood into the part is anormally increased.

The internal surface of the membrane also gives origin to a perpendicular septum, pervious, however, in a multitude of points, which divides the corpus cavernosum longitudinally into two portions, regarded by many anatomists as two distinct bodies but we cannot agree with this opinion. Such an error, indeed, may be easily committed by those who have dissected no other organs than those of man; but the naturalist, who regards anatomy in a more philosophical point of view, and who seeks in comparative anatomy the solution of problems which it is impossible to resolve by the simple anatomy of the human subject; the naturalist, I say, cannot partake this idea. Here we must invoke the name of CUVIER, and illustrate our opinion by a reference to some of his discoveries. CUVIER, then, dissecting the penis of the horse, perceived that the perpendicular septum, of which we have already spoken, was by no means complete or perfect. You know that other authors have mentioned this circumstance before him, and if we have mentioned the name of CUVIER, it was because that great man directed his attention more particularly to this question. Thus, in dissecting several animals, CUVIER found no trace of this cloison; it is completely absent in the solipedes, in the cetacea, and in the pachyderma, if we except the rhinoceros.

We shall now proceed to notice the erectile tissue of the corpus cavernosum, and we do not imagine, after the experiment we propose to show you, that you can possibly consider with some anatomists the erectile tissue to be composed of true cells derived from the fibrous membrane, and forming a kind of system intermediate between the arteries and veins. No, gentlemen, the cells of the erectile tissue are nothing but continuations of the veins and arteries: we have here portions of the penis of an elephant upon which CUVIER made his experiments; he found this enormous corpus cavernosum traversed in all directions by innumerable venous branches, forming frequent anastomoses between each other, communications so numerous as, according to the expression of CUVIER himself, to give the tissue a truly cellular appearance. Here you see the whole of this venous tissue, with parietes confounded together, opening one into the other, and forming a true reservoir, where the blood during erection may accumulate and stagnate, until it is removed by other causes, which shall presently be discussed. You may convince yourselves of the truth of the opinion we have now advanced, by dissecting a certain quantity of penises of animals, in whom this disposition becomes gradually more difficult to discover; as, for example, that of the horse and bull. If you divide the penis of one of these animals by a section running along the length of the corpus cavernosum, you will, I venture to say, be convinced that the erectile tissue merely consists in a great quantity

of bloodvessels, and particularly veins, arranged in a special manner.

The nerves of the penis are of considerable volume, and are derived from the second, third, and fourth sacral pairs; its arteries are furnished principally by the internal pudic, which gives off the branches to the corpus cavernosum and the dorsum of the penis; the veins follow the same arrangement, and bear the same names. I cannot quit this subject without mentioning some experiments which I have made, and which, indeed, you may all make yourselves, viz., the injection of the erectile tissue by the arteries or veins. If you push the injection through the arteries of the corpus cavernosum, it soon fills the pretended cells, of which we have already spoken, but if you choose the vein, the same cells become injected more quickly, and in much greater number. We shall place before you various preparations made in this way, and we beg you in particular to study the penis of this elephant, where the disposition of the venous cells is extremely well marked, and where the injection shows in a very evident manner how the less erectile tissue is essentially composed of venous plexuses.

The glans in the human subject is an ovoid body, terminating the penis anteriorly, and formed by a very fine and close tissue of bloodvessels,—a tissue continuous with the spongy body of the urethra; the external membrane covering it is continuous on one side with the skin of the prepuce, and on the other with the lining membrane of the urethra: it presents a smooth, delicate surface, upon which, with the aid even of a weak microscope, we can perceive, especially near the base of the gland, a great number of papillæ, analogous, as it seems to us, to those of the tongue, or to those which we find near the extremities of the fingers, and giving this part of the penis the exquisite sensibility with which it is endowed.

In order to protect the glans from the irritating effects which long-continued friction &c. would certainly excite, nature has furnished it with a fold of skin which in most cases covers the penis altogether, and is denominated the prepuce: the skin of this part adheres all round to the depression behind the glans, and in addition to this circular attachment, is fixed by a kind of longitudinal fold, the frenum, a little behind the orifice of the urethra: finally, it is this part of the organ which some nations excise from their infant children, and it is its inflammation which constitutes in certain cases paraphymosis &c. The glans is essentially composed of bloodvessels; it is nothing more than a prolongation of the spongy tissue of the urethra, a circumstance proved to demonstration by this penis, the corpus cavernosum of which is injected with blue, and the corpus spongiosum with red. Remark how the injection thrown into the cavernous veins has not passed the limits of the corpora cavernosa, while the coloured matter thrown into the spongy portion of the urethra has filled the whole of the glans; the same takes place when air is blown in, either through the vessels of the corpus cavernosum, or through the spongy tissue; in all cases it passes from the latter to the glans, which it distends as in erection.

The glans evidently forms a part of the copulative apparatus; a quantity of blood is required sufficient to determine a certain degree of rigidity, and give it sufficient consistency to be introduced into the interior of the female organ. We now proceed to the phenomena of erection.

When the male is tormented by the desire natural to his sex, the organ of reproduction undergoes a remarkable change, and becomes rigid instead of the flaccid condition which it generally presents: everything which passes here, indicates a considerable afflux of blood to the part; the dorsal arteries beat with increased force, the veins become more developed, the penis changes its form, and its curvatures disappear, and all these phenomena are accompanied with sensations which it is unnecessary to describe.

Let us now ask, what are the causes which determine the erection of the penis; or in other words, by what means is the blood attracted to the organ? Ancient writers attributed it entirely to a mechanical cause, the compression of the dorsal veins between the body of the penis and the pubic arch; a compression opposing the return of the blood introduced from the arterial system, and thus determining a kind of sanguineous engouement, while the arteries of the corpus cavernosum, more solid and resisting, constantly pour their blood into the erectile tissue, and thus produce the pressure of the penis against the symphysis of the pubis. According to these authors, the ischio-cavernous muscles contributed chiefly to this effect, and were thence called the erector muscles of the penis. This theory does not appear very probable: in fact if you remember what we said, when speaking of erection, of the pulsation of the arteries, engorgement of the veins, and the sensations accompanying this phenomenon, you will be convinced that erection depends on causes not passive, but active; besides, do not we find the same tissue endowed with the same erectile property in various parts of the body, while at the same time we

cannot attribute its erection to any mechanical compression analogous to that supposed in the penis: the nipple particularly presents a phenomenon of this kind; its erection is determined by simple excitation, and it seems to be sympathetically connected with the changes which take place in the clitoris of the female. Even during the act of copulation, however compressed the penis may be, it never suffers a degree of constriction sufficient to interrupt the circulation in a manner to constitute the erectile state, for the ischio and bulbo-cavernous muscles bring the penis downwards and forwards, and are far from exercising that influence in the production of erection which is commonly assigned to them.

The opinion of the older authors just alluded to is abandoned at the present day. The best physiologists concur in thinking that an irritation communicated from the glans to the spongy and cavernous bodies is the determining cause of erection. But what are the conditions necessary to determine this erection? An increased afflux of blood; in other words the blood must arrive in greater quantity, or be removed more slowly than ordinary; and whenever the equilibrium of the circulation is lost, whenever the blood arrives in too great mass by the pudic arteries, or is carried back into the circulation too slowly by the pudic veins, erection takes place. This phenomenon, then, as you see, may be explained in two different ways, but I would invite you to reflect that whenever there is an irritation determined, the afflux of blood becomes more considerable; and if on the other hand you consider the number and volume of nerves which supply the penis, and the manner in which they accompany the vessels &c., you will not hesitate to attribute the erection of the penis to a nervous irritation, determining an abnormal afflux of blood to the part. The arteries under the immediate command of the nerves carry an increased quantity of fluid to the organ; the venous circulation does not become more active at the same time; it would rather seem to be retarded; such a state of things must give rise to an accumulation of blood in the penis, and the consequent production of erection; tie the veins of the penis in an animal, and you produce erection.

Swammerdam and De Graef amputated the penis of a dog during copulation, and found the tissue gorged with blood, but in proportion as the fluid escaped, the organ returned to its original flaccidity and dimensions. The spleen also seems to be formed of a tissue very analogous; look at this beautiful preparation; and see how the spleen has become engorged when its vein has been tied. Let us now terminate this subject with a single remark; the relation between the afflux and reflux of blood in the penis is broken through, altered by an irritation depending upon venereal desires; the blood transported by the arteries is not removed in equal time by the veins, and perhaps, as the ancient authors said, the stagnation of blood is in a slight measure favoured by the compression of the dorsal veins.

Had we intended, gentlemen, to deliver a course of anatomy, we would have spoken at greater length upon the nature and structure of the erectile tissue, which our great anatomist Bichat, notwithstanding its importance and peculiar disposition, neglected to place amongst the primitive tissues. We would also have noticed the functions it is called upon to perform in the organs of secretion, in the mamma, &c.; however, we shall merely say that the tissue is nothing but the termination of the arteries; and the commencement of the veins is placed there by nature to show us, as it were, the connexion between the two systems, which forms during the time of erection a true reservoir for the blood.

Cuvier, while dissecting the penis of the elephant, Chaussier and Beclard by examining the organ in man, have found that the blood is contained in a venous plexus, and not in cells furnished by the fibrous membrane of the corpus cavernosum; were such a disposition really to exist, we would ask the advocates of this theory, how the state of erection could disappear with such promptitude, if the blood were really situate externally to the vessels, and extravasated as it were into the cavernous tissue. Does the blood transported into the erectile tissue, and producing its development or erection, in consequence of a nervous irritation, does it, I say, stagnate in the organ because the action of the venous system is diminished? This was the opinion of Cuvier, who thinks that the greater part of the corpus cavernosum is formed by veins. We partake of this opinion; but as it has been demonstrated that increased nervous influence in any part also increases the afflux of arterial blood, we think that these two causes united may concur to the production of erection. The muscles proper to the penis are three; the transverse perinei, ischio-cavernous, and bulbo-cavernous; the two former by their action carry the penis downwards and forwards, especially in the commencement of the erection; as to their attachment, relative position, &c., we do not think it necessary to occupy ourselves with them here.

We have now described the parts essential to reproduction, the testiculi and its dependencies, and the accessory parts, viz., the prostate gland, &c.; we have also noticed the urethra or excretory canal, and given you a brief description of the penis or copulative organ. This division of the genital organs appears to us consistent with philosophical views; for we see how a portion of the genito-urinary apparatus, the prostate gland for example, may disappear (in the greater part of the rodentia) without injuring in the least the faculty of reproduction. The copulative apparatus is also merely accessory, for it does not exist in the mollusca or cartilaginous fishes: but the testicles, the secretory organ of the semen, must exist in the whole animal series; it is in fact found in all animals, and hence we have named it the essential organ; but you are not to imagine that it is always found in so complicated a degree as in the mammalia. The secretion of the semen; without which fluid reproduction is evidently impossible, has a most marked influence upon the constitution at large. Look at those unfortunate creatures who have been deprived of these organs, in compliance with a disgusting and barbarous custom; look at their effeminate form, their small puny voice, resembling that of a child; the absence of hair which distinguishes the adult. In a word, the development of various organs and even functions has been arrested by the cruel act which removes them from the ranks of men.

We see analogous effects produced in animals; thus for example, if we remove the left testicle from a stag, an animal whose horns are not permanent, the horn on that side does not fall the next year, and if the operation have been performed before the horns have shot up, they do not grow at all. Again, if both testicles be removed at the time when the horns should be reproduced, this does not take place, and the animal assumes an aspect exactly similar to that of the female. We have thus terminated what remained to be said concerning the reproductive apparatus in *man*.

Discovery of Arteries in the Penis.—We have before us a translation of a paper published in the *Archives of Anatomy and Physiology* (Berlin), No. 2, 1835, entitled "Discovery of some arteries supposed to perform an important part in the phenomena of the erection of the penis in man and the lower mammalia," by Professor Muller, the editor of the journal. The paper forms a very interesting article, and has been translated for re-publication by Mr. John Wilson, of Bohn, and as soon as copies of the minute engravings are completed, we shall insert it.

CLINICAL LECTURE

ON

WOUNDS OF ARTERIES,

INCLUDING A CASE IN WHICH THE COMMON CAROTID WAS TIED.

By ANDREW ELLIS, Esq.,

M.R.C.S.I., Surgeon to the Jervis Street Hospital, and Lecturer on Surgery in the School of Anat., Med., and Surg., Peter Street, Dublin.

Gentlemen,—An opportunity has lately occurred to us of witnessing the symptoms and treatment of two very interesting and important cases of hemorrhage,—those of Johnson and Byrne, and to these cases I shall now call your attention, prefacing the discussion of them with a few general remarks on the structure and properties of arteries, and some observations on the established doctrine of *arterial* hemorrhage. On these subjects I will not detain you long, feeling, as I do, that it is not the province of a clinical lecturer to enter at any length into controversial arguments on anatomical or physiological subjects.

By careful dissection the parietes of an artery may be separated into three layers, which are perfectly distinct from each other, not only in their relative situations, but likewise in their physical and vital properties; and, consequently, in the morbid phenomena to which they are liable. These layers, or coats, being placed one over the other, are usually designated by the words *internal*, *middle*, and *external*. The internal, or lining coat, is delicate, smooth, and polished, exhibiting many of the characters of serous membrane, to which it bears a close analogy, both as regards its natural appearance and the pathological changes to which it is liable. However, as it differs from them in some particulars, which on the present occasion I do not feel it my duty to specify, it is usually referred to the "unclassifiable membranes" of Bichat. The middle coat is comparatively strong, and is obviously composed of yellowish fibres, which run chiefly in a circular direction. These fibres have been considered by some physiologists to possess mixed properties, being partly muscular and partly elastic, whilst others maintain that they are not endowed with any of the attributes of muscularity. It would be foreign to our present purpose to canvass the conflicting opinions which have been advanced on this subject; let us, therefore, content ourselves

with the recollection of the important fact, that all parties agree in assigning to those fibres a power of self-contraction, with which they are certainly endowed. The external coat is often called "cellular;" however, you are not to infer from this circumstance that it is lax in its texture, the very reverse being the fact. Indeed it is only by protracted maceration that it can be reduced to anything resembling "cellular tissue." The general description which I have now given you of the structure of arteries, will not apply either to those of the brain or the nutritious arteries of the bones, which are divisible into two coats only. Taking an artery as a whole, we say it is well organized, inasmuch as it receives a tolerably good supply of those "systems" which are considered essential to organization, such as bloodvessels, nerves, exhalents, and absorbents. This being the case it follows, as a natural consequence, that arteries, in common with all the other parts endowed with vitality, are susceptible of disease, yet capable, in many instances, by the power of self-preservation, of arresting the baleful effects both of injury and morbid action. In addition to the coats which I have already described, there are certain arteries, of a high order, which possess a fourth, common to themselves and the accompanying veins and nerves; such, for instance, is the case with the principal arteries of the neck and thigh. This common investment, or sheath, is composed of dense cellular tissue, and is connected to the parts included within it by an exceedingly lax reticular membrane.

Having thus reminded you, in a general way, of the structure and properties of arteries, I now beg your attention while I submit for your consideration some important facts relative to wounds of those vessels, as established by the experiments and observations of PETIT, JONES, BELCLARD, and others. When a large artery has received a small punctured wound, the following circumstances succeed the infliction of the injury. On the withdrawal of the wounding instrument, the blood escapes from the vessel, and in all probability some of it will make its way through the wound in the sheath into the neighbouring cellular membrane; or even a portion may follow the instrument out through the wound in the integuments. Now if the wound should be of trifling extent, the breach may be repaired by some of the blood, at the moment it issues from the aperture in the artery, becoming entangled in the loose reticular membrane which connects it to the sheath; by this means, the correspondence which previously existed between the aperture in the artery and that in the sheath is completely done away with; the blood coagulates, and presents a sort of temporary compress or barrier against further extravasation. In the course of a few hours, inflammation is established in the lips of the wound, the arteriæ arteriarum pour out lymph, this quickly becomes organized, and the adhesive process finally seals up the wound; and there being no further use for the clot of blood, the absorbents effect its removal.

Such are the salutary changes accomplished by nature, provided the wound of the artery do not engage more than one-fourth of its caliber. Let us now suppose a case in which the vessel has been completely divided, and inquire what steps nature will take in that instance, with a view to accomplish a cure independently of the interposition act. In a case of this description, the cut extremities of the artery contract as to their diameter, and retract within the sheath at the moment the division takes place; the gush of blood, which must be considerable, is quickly followed by the fainting of the patient: a languid state of the circulation is the immediate consequence. Accordingly a coagulum forms between the retracted extremities of the wounded artery, so that all that portion of the sheath which was left empty by their retraction, is now completely filled up by coagulated blood. Coagula also form within the extremities of the divided artery, extending from the mouth or mouths to the next anastomosing branches. In a short time inflammation will set in, as in the former case, and lymph will be shed by the small vessels of the wounded artery, which will constitute a sort of boundary or line of demarcation between the internal and external coagula. The next stage consists in the organization of this lymph, and the establishment of the adhesive inflammation, by which the artery is rendered impervious for ever. Under these circumstances, the future circulation of the limb must necessarily be carried on by means of the collateral branches, which gradually become enlarged for the purpose. When an artery is divided to all but one-fourth of its diameter, and then left to nature, according to the experiments and observations of the authors already alluded to, it is quite possible that the individual may survive the consequent hemorrhage without the aid of surgery. The steps taken by nature do not materially differ from those already mentioned in the case where the division has been complete, inasmuch as the remaining fourth is quickly removed by absorption, and the future circulation carried on by means of auxiliary

branches. When a large artery is cut through one-half of its diameter, and then left entirely to nature, the animal perishes; or should the vessel have been previously deprived of its sheath, as in some of the experiments of Beclard, a smaller wound may be attended with a fatal hemorrhage.

Having thus briefly adverted to the means adopted by nature in suppressing hemorrhages consequent upon wounds of arteries, I now beg your attention to a few observations as to the different methods employed by art for the accomplishment of the same object. The surgical means of restraining hemorrhage may be fairly included under five heads, viz., styptics, caustics, the actual cautery, pressure, and the ligature. Any substance capable of arresting hemorrhage without injuring the structure of the bleeding vessel or vessels, is, in surgical language, denominated a "styptic." All styptics do not act in the same manner; for instance, some accomplish the desired object by exciting the contraction and retraction of the vessels; whilst others prove efficacious by promoting the formation of a coagulum on the surface of the wound. To the first class I would refer cold air or water, spirits of turpentine, diluted acids, solutions of certain astringent salts, such as super-sulphate of alum, acetate of lead, the sulphates of zinc, iron, and copper. To the second belong certain dry absorbing substances, such as agaric, the pith of rushes, the fur of a hat, and cobwebs. I consider that these substances prove useful by absorbing the thinner parts of the blood with which they combine, and in this way assist the fibrine, or coagulating portion, in forming a common clot; by which further effusion is resisted. I need scarcely tell you, that styptics can only prove useful when the bleeding is from small vessels.

The caustics most frequently employed as anti-hemorrhagic remedies are the nitrate of silver and sulphate of copper. The latter was much prized some centuries back by the surgeons of that time, who being unacquainted with the superiority of the ligature, employed it, even in cases of amputation, under the name of "the blue button of vitriol." The instances in which caustics of any kind are had recourse to in the present day are exceedingly rare; in fact it is only in those cases where styptics and pressure have proved ineffectual, and where the ligature cannot be conveniently applied, that I have myself found the nitrate of silver very useful in suppressing hemorrhages from wounds of the tongue, and in cases of obstinate bleeding from leech-bites. I may here mention, that the practitioner is often annoyed by perplexing hemorrhages of this description, when leeches have been applied to children. I recollect having heard, on one occasion, a distinguished lecturer in the city call the attention of his class in a very forcible manner to this "astonishing phenomenon," which he "would not pretend to explain." The fact in question, however, does not appear to me to be so opposed to the well-known laws of the animal economy as to draw forth the humiliating declaration of the learned professor. When we call to mind the high degree of vascularity the skin of the child possesses, the rapidity of its circulation, the small quantity of fibrine which exists in the blood at this period of life, and the utility of a clot in stopping hemorrhages, the "astonishing phenomenon" is deprived of the alleged obscurity, and rendered intelligible to all medical men of moderate attainments and ordinary understanding. The caustic differs in its mode of action from the styptic, inasmuch as it not only stimulates the vessel to contraction, but likewise produces a slough or eschar, which acts as a temporary plug to the open extremity of the wounded artery. However, should it unfortunately so happen that this temporary barrier becomes displaced before the adhesive inflammation has permanntly closed the wound, the bleeding must inevitably occur. Under these circumstances you must at once perceive that caustic is a very uncertain means of suppressing hemorrhage.

The actual cautery was formerly a favourite with surgeons as an anti-hemorrhagic remedy, but it is now employed only in those cases where styptics and caustic have proved ineffectual, and neither pressure nor ligature can be applied with advantage; such, for instance, as after the removal of fungous growths from the antrum, vascular tumours from diseased bones, &c. &c. The modus operandi of the actual cautery is not materially different from that of the ordinary caustic: the superior degree of activity of the former seems to constitute the difference between them.

Pressure may be applied in two ways, with a view to suppress hemorrhage from a wounded artery, viz., either on the trunk of the vessel leading to the wound, or immediately in or at the wound itself. For example, let us suppose a person to have received a wound of the popliteal or tibial arteries, and that a smart hemorrhage is the consequence. In a case of this kind the surgeon should in the first instance either make, or cause to be made, pressure on the femoral artery, until the necessary steps for securing the vessel at the wound can be taken. Thus, then, you are to recollect that when pressure is applied at

a distance from the wound the advantage gained is only of a temporary nature. Let us now suppose a case in which there is an extensive lacerated wound in the palm of the hand, by which the palmar arch and its branches have suffered severely, and the consequent bleeding is considerable. The best means of treating a case of this description is by a combination of *styptics* and *pressure*, made at the wound, in the following manner:—A small portion of lint or sponge should be dipped in a solution of alum, spirits of turpentine, or some other styptic of this class, and then applied to the mouths of the bleeding vessels; a second compress should then be placed over the first; and so on until by a succession of them a cone is formed, the apex being in the bottom of the wound, whilst its base should project above the level of the skin. The compresses having been thus adjusted, they should be kept firmly in their place, by a roller applied around the hand. The dressings may, with advantage, be wetted from time to time with cold water; but they should not be removed for three or four days, provided the patient do not suffer from pain and tension in the parts engaged in the injury. By this time the adhesive inflammation will have closed up the mouths of the wounded vessels, and suppuration will be established, so that the compresses may now be removed both with ease and safety. When arteries of a moderate size have been divided by a sharp-cutting instrument, the bleeding may be restrained in many instances, by simply bringing the lips of the wound in contact with each other, and retaining them in this position by suture and bandage. This is the practice usually adopted after operations performed on the lips, either for the purpose of removing morbid structure, or curing congenital malformations.

Of all the methods supplied by art for restraining *arterial* hemorrhage, the *ligature* justly claims the first place. I wish therefore to call your attention to some of the effects produced by its application. At the moment a ligature is firmly tied round an artery, the cavity of the vessel is not only rendered impervious, but its internal and middle coats are cut completely through; the blood must necessarily be determined to the collateral branches, which become enlarged for its accommodation. All that portion of the artery which may extend from the ligature to the next collateral branch, becomes filled with a coagulum, but should it so happen that the ligature was tied close to the origin of an anastomosing branch, then there will be no coagulum formed, for this obvious reason, that there was no resting place left in which the blood could coagulate. The phenomena which I have just mentioned are of immediate, and almost simultaneous occurrence; but in the course of a few hours other important changes ensue. Inflammation takes place in the divided coats of the artery; this necessarily gives rise to the effusion of lymph, which quickly becomes organized, so that the vessel is now obliterated by the process of adhesion. The ligature by its pressure on the external coat excites ulcerative absorption in this tunic, which continues until the artery becomes completely divided, and the ligature itself detached. In the course of time, the coagulum will be absorbed, and the artery will degenerate into a sort of ligamentous substance, up to the next collateral branch.

Having made these preliminary observations, I think we may now advantageously proceed with the discussion of the cases before us. They will be read for you as noted down by our intelligent friend Mr. CULLEN.

Case.—January 19th, 8 p.m. Samuel Johnson, aged 28 years, and of respectable appearance, was brought to the hospital at 5 o'clock this evening with a wound about an inch and a half in length and extremely deep, extending from the angle of the jaw towards the chin. The submaxillary gland was completely cut through, and there was profuse hemorrhage both from the upper and lower parts of the wound, supposed to come from the cut extremities of the facial artery. The bleeding could be restrained tolerably well by pressure made in the wound when directed towards the ramus of the jaw. He was extremely cold, pulseless, and quite exhausted. He was accompanied to the hospital by a medical gentleman, Mr. BARKER, who stated that he had been suddenly called in to visit the patient, whom he found at the house of a respectable family at Summer Hill, in an almost lifeless state; that "he had been informed, that the unfortunate man had been in a state of despondency for some time past, and that he had himself inflicted the wound with a razor a few minutes before his visit." Soon after the patient's arrival at the hospital, the wound was enlarged and the bleeding vessel sought for, with a view to secure it in a ligature; however, the great depth of the wound, the constant supply of blood poured into it, and the retracted state of the artery, rendered the attempt fruitless. The wound was then plugged up with lint dipped in spirits of turpentine; graduated compresses were next applied, and kept firmly on with a roller. Immediately after the wound was dressed an effort was made to take off the

patient's clothes, but on assuming the erect posture in order that his coat might be removed, he instantly fainted, and was consequently again placed in the recumbent posture. About three hours afterwards, having recovered his strength a little, he quietly got out of bed, stole down stairs, and ran out of the hospital. He was immediately pursued, and overtaken within a few doors of the hospital, leaning against the railing of an area, having become much exhausted in consequence of the previous loss of blood. He was brought back to the hospital, and put to bed; an anodyne draught was given him, which he tasted and then flung out of his hand.

20th. He spent a restless night, talked much of going home, is irritable, and seems unwilling to answer questions. Pulse quick and feeble; the temperature of the skin natural.

22nd. He has been peevish and impatient since last report; is constantly fiddling with and pulling at the bandage and dressings. This morning he applied the bread and milk he got for his breakfast to the wound, which looks indolent, and quite free from suppuration. He strenuously refuses to take medicine.

25th. Nothing particular occurred from the 22nd up to six o'clock this morning, when he became alarmed by a fresh gush of blood. He immediately leaped out of bed, and ran out of the ward for assistance, crying out that he was "bleeding to death." The hemorrhage was restrained by compression and bandage, as in the first instance; and he is at present more tranquil and manageable than he has been since his admission into the hospital.

26th. At eight o'clock yesterday evening having felt the dressing wet with blood, he called for assistance as in the morning, and on removing the bandage to expose the wound a frightful gush took place, which, in an instant, reduced him almost to a state of syncope. Compression was made, and Mr. Ellis and Mr. O'Reilly were summoned. On their arrival Mr. E. enlarged the wound, but the continued hemorrhage, which was very profuse, rendered it impracticable to particularize or secure any vessel. After a short time, the patient having become exhausted, the bleeding ceased, but still the open vessel could not be found. Under these embarrassing circumstances, it was deemed expedient to tie the common carotid artery. Accordingly an incision, about three inches in length, was extended from the wound down along the inner margin of the sterno-mastoid muscle. By means of a knife and director, the various layers of parts were successively removed from the skin down to a lymphatic gland which lay in front of the artery, and which, in consequence of the oblong shape, whitish colour, and the borrowed pulsation it presented, was for a moment mistaken for the vessel itself: however, on raising the gland a little out of its place, the descendens noni and sheath of the carotid came into view. The sheath was now cautiously opened with a blunt silver knife (a fruit-knife), and an aneurysm needle armed with a ligature passed round the artery, from without inwards. The ligature was now tied, and one end having been cut off close to the knot, the other was drawn out through the recent wound, the lips of which were brought together by adhesive plaster; the original wound was filled with lint as before. The patient was then ordered a composing draught, which had the effect of procuring some refreshing sleep through the night. He feels comparatively well to-day. Pulse 96, soft and compressible.

27th. He passed rather a restless night, got out of bed, and sat sometime at the fire; pulse more frequent than yesterday; the pulsation has returned to the temporal artery of the affected side, but is extremely feeble; the bowels have not been moved; was ordered a purging draught.

28th. He was very troublesome during the night, got no sleep, and attempted to remove the dressings from his neck. At present he is extremely irritable, and obstinately refuses to take medicine of any kind.

29th. He was exceedingly restless through the night, and got out of bed three or four times. In the course of this day he got the blanket over his head, and then commenced picking and pulling at the dressings until he removed them, and exposed the ligature. The dressings were reapplied, and on expostulation he promised to be quiet; indeed, he always promises fairly, and seems quite rational when spoken to.

February 1st. He has been tolerably well since last report up to eleven o'clock yesterday, when he suddenly became cold, weak, and sick; his stomach turned and ejected its contents; the pulse fell to 60, and was scarcely perceptible. He was given some warm wine, which was immediately rejected by vomiting; he then recovered a little, but suffered a good deal from time to time during the day from sickness of stomach and hiccup. At ten o'clock p.m. he complained of numbness in the affected side, which extended from the head and face down the arm. He was ordered carbonate of ammonia, with a mixture of opium, and lemon juice to be

taken during the effervescence, but he refused taking it. At present his stomach is irritable, but less so than it has been during the night; he continues to refuse medicine, but consents to take a little chicken broth.

3rd. He took some broth, which seemed to agree with him tolerably well, but he has been very much teased with a very distressing hiccup. The ligature came away with the dressing to-day; the wound is nearly healed, but looks pale and glassy. He is ordered a cordial mixture containing peppermint water, calomel, magnesia, acetated mixture of opium, ether, and sirup.

4th. He took the mixture regularly without advantage, the hiccup having continued with little intermission during the night, and being at present very distressing. Ordered a fetid enema, and a sinapism to the epigastrium.

5th. Hiccup as before; bowels confined. To have a draught of castor oil and spirits of turpentine, and the fetid injections to be repeated every third hour until the bowels are affected.

8th. The hiccup has continued with little intermission since the last report, although the bowels have been freely acted upon; twelve leeches were directed to be applied to the epigastrium, and a draught containing thirty drops of the acetum opii to be taken at bed-time.

9th. The hiccup ceased immediately after he took the opiate draught, and he slept quietly during the night; however, the hiccup returned at ten o'clock this morning, and is at present as violent as before. He was ordered a blister to the epigastrium, cathartic pills during the day, and the opiate at bed-time.

10th. He slept for three hours last night without intermission; but the hiccup annoys him occasionally to-day; in every other respect he appears to be quite well.

14th. He took an opiate draught every night since last report; the hiccup has left him altogether, and he is in every respect perfectly well, but is unwilling to return to his friends.

Such, gentlemen, is the history of Johnson's case, and indeed the report is so ample and so explanatory, that little remains for me to say in the way of commentary. It would have been very desirable, were it practicable, to have tied the wounded artery in the first instance; but having failed in my efforts to accomplish that object, I had recourse to an irritating styptic and compression. I selected the turpentine, hoping that by its stimulating properties it would excite a sufficient degree of inflammation to seal up the wound in the bleeding vessel by the process of adhesion; but, in this speculation I was unfortunately disappointed. I may here mention to you that wounds inflicted by suicides are usually indolent, and seldom inflame or heal like wounds produced by other causes. I attribute the difference to the morbid state of the patient's mind; which must necessarily influence the curative process in cases of this description. It is somewhat remarkable that the bleeding did not occur when the patient himself removed the compress and bandage on the third day after the infliction of the wound; and that it should take place at so remote a period as the sixth day, when no exciting cause whatever existed. You may very naturally inquire, why was not the external rather than the common carotid tied? My reply is, that under all circumstances of the case it was both an easier and a safer operation to tie the common than the external carotid. If the latter be tied, the ligature should be applied below the origin of the labial artery, otherwise the operation would be worse than useless: now, this would bring the operator down to the lower third of the external carotid, where it is crossed by the digastric and styrogoid muscles, and the ninth pair of nerves. Well then, let us now suppose that these parts have been properly disposed of; the thyroid and lingual arteries, which arise from this part of the vessel, come into view, so that the ligature must be applied either close to the origin of the external carotid itself, or close to those vessels. Under such circumstances a coagulum could not be formed; the adhesive process would be interrupted by the circulation of the fluid blood; so that the coming away of the ligature would, in all probability, be attended with a secondary fatal hemorrhage. Thus, then, you may perceive, that the operation of tying the external carotid would be both difficult and unsafe, and consequently liable to objections which cannot be fairly advanced against the propriety of tying the common carotid under the particular circumstances of the case before us. It is comparatively easy to expose the common carotid in the upper third of its course; and I am induced to think that the difficulty of passing a ligature around it, without including or otherwise injuring the internal jugular vein or par vagum, has been greatly exaggerated: I must say that neither of these important parts presented

the slightest obstacle to the passing of the aneurysm needle, nor can I confidently state that I saw them at all. However, be it remembered, that the operation was performed under rather embarrassing circumstances, and by candle-light.

The danger of secondary hemorrhage from the common carotid, on the separation of the ligature, is not, in my opinion, very great, provided the artery was in a healthy state previous to the operation; for the fact of its not giving off any important branches from its origin to its termination, is a circumstance conducive to the formation of a long coagulum; consequently, the adhesive process which is going forward in the neighbourhood of the ligature, is not very liable to interruption, either from the "vis-a-tergo" of the heart's action, or the circulation of the fluid blood.

The next feature in the case which I deem worthy of your attention, is the very distressing hiccup which occurred on the 3rd of February; here, I beg to observe, that the causes and pathology of hiccup are but imperfectly understood; however, it is usually considered to indicate a morbid action of the diaphragm, sympathetically induced by irritation in the stomach. Taking this view of hiccup it might be fairly supposed, that in this instance it was the result of some injury done to the par vagum or phrenic nerves, in the neighbourhood of the wound; but, when it is recollected that this symptom occurred, for the first time, on the very day the ligature came away, which was the ninth after the operation, the idea of attributing it to any such cause must at once be abandoned. On the other hand we ought not to forget the fact, that the medicines which are usually administered for the purpose of correcting acidity in the stomach, and other causes of gastric irritation, were for a considerable time employed without advantage, and that it was not until the acetum opii was taken in large doses that any beneficial effect was produced.

I do not feel that further remarks on the present occasion would be productive of much advantage; I trust I have already said sufficient regarding the origin, treatment, and termination of the case under consideration, to convince you of the great benefits which the science of surgery is capable of conferring on suffering humanity. I have now trespassed so long on your time and attention, that I will leave the discussion of Byrne's case to my intelligent colleague Mr. Adams, whose acquirements and knowledge of the subject qualify him to do you ample justice.

CASE OF CATALEPSY.

By Robert S. Hannay, *M.D., Lurgan.*

The subject of this case is a robust young woman, with light blue eyes, brown hair, and fair skin. She had been married against her mother's will eight months previous to her illness, at which period she was seventeen years old, and weighed 182 pounds.

On the 13th of June, 1834, she complained of headach and pains in her back, when she sent for Mr. Hume, whom she had engaged to attend her during her approaching confinement. Mr. H. visited her several days in expectation of a miscarriage, but the symptoms becoming very serious, Dr. Miller and Mr. Bell were called into consultation. On the 17th they had her bled and put into a warm-bath at 100°. Whilst in the bath she lost the powers of speech and deglutition, the latter she has never recovered. From this time till the 29th she had frequent attacks similar to those hereafter described.

June 29th. Her husband requested me to visit her. On going to see her I found her suffering much from hunger. I advised the stomach pump to be used, and on its arrival we injected a pint of gruel into the stomach. Shortly after using the pump, she began to toss about in bed, from side to side and forwards, so that her head touched the bed while she was in the sitting posture; after tossing about for an hour and a quarter she threw herself on her back, pointed her fore-finger to the ceiling, and fixed her eyes as if looking steadfastly at the object to which her fingers were pointed, and remained in this state of catalepsy for an hour and a half she had four such attacks on the 29th; whilst in the fit her pulse was 72, full, and regular. On moving her arm or finger, the position in which it was left was retained till she awoke from the fit, which she did with a gentle moan, and continued to moan and scream as if in labour till she again commenced to toss about as before. As she had lost the power of expelling the urine the catheter had to be used, and a pint of thick urine of a dark colour and fetid odour was taken away. She had not slept for four nights, therefore sixty drops of laudanum were administered by the stomach pump. On examination per vaginam a round and solid body was felt in the uterus, the neck of the uterus projecting into the hollow of the sacrum like a nipple, a little more than an inch in length.

June 30th. Slept four hours last night,

bowels costive, and voided no urine; jactitation as yesterday; catalepsy during the night, from which she awoke as usual; has not spoken since; vomited a little in the morning, and makes signs for drink; had gruel, and afterwards milk and water by the pump. At two o'clock repeated the gruel and water; introduced the catheter, urine as before, but less in quantity. At ten o'clock repeated the gruel with the addition of an ounce of castor oil and a cup of tea.

July 1st. Bowels moved by the oil; in other respects as yesterday.

11th. Fits continue as heretofore, without any alteration, except that, while tossing about in bed, she suddenly spoke in an angry tone to the nurse who was attending, since that she has retained the power of speech only for a short period.

13th. At seven o'clock in the evening, while using the pump, a fit of catalepsy seemed to be commencing, which was known by the eyes turning up. The tube was instantly withdrawn. The lower jaw was pulled down by the action of the muscles, as in yawning immoderately. The eyes remained fixed and protruding; eyebrows drawn up so as to wrinkle the forehead transversely; cheeks pale; pulse 72, very full and bounding; posterior muscles of the neck tense, drawing the head back upon the shoulders; arms stretched out stiff, toes firmly flexed. The tension of the muscles of the face continued to increase till the mouth formed a complete circle about two inches in diameter. This fit lasted about two hours, and terminated by jactitation; she never had a similar one. The state of the disease continued as before until the 23rd of July, when she was removed into the country, about two miles, to be under her mother's care.

27th. Was visited by Dr. Stuart, of Lisburn, who recommended a strait-waistcoat to prevent her tossing about, and the internal use of musk in large doses. On his departure she said she would neither take the musk nor use the waistcoat; she, however, afterwards tried on the waistcoat, but it was of little use.

Aug. 8th. Can take no food to-day.—19th. Has taken neither food nor drink since the 8th.—Sept. 3rd. In almost continual catalepsy.—8th. A little tea given by the stomach pump.

Oct. 1st. The patient's friends having been persuaded that she was not pregnant, or that it was a "false conception," I to-day examined with the stethoscope, and heard the child's heart pulsating in the left side between the crest of the ileum and umbilicus, and the placental bruit on the right side.

4th. Complains of sore throat on the introduction of the tube; on withdrawing it, a quantity of air rushed up the tube, followed by slight globus hystericus.

6th. Globus hystericus relieved by the introduction of the tube; air rushing up it.

7th. Had five cataleptic fits during the last twenty-four hours, each lasting about three hours.

8th. One fit lasted ten hours to-day.

16th. Fit lasted fifteen hours.

23rd. Labour commenced this morning at eight o'clock; at five in the evening she was delivered of a living and healthy girl. Immediately after the expulsion of the child she drank a glass of wine, but since that time she has never swallowed either solids or liquids. There was nothing remarkable in her recovery, except the continuance of the cataleptic fits and jactitation. She did not suckle the infant.

Dec. 12th. Having yesterday been alarmed, she was suddenly seized with a tossing fit, which was succeeded by catalepsy of twenty-six hours duration.

28th. At eleven o'clock to-day she awoke from a fit which had continued for seventy hours, during the whole of which period she never was seen to move her eyes, eyelids, or fingers; in fact, except in her breathing, which was regular, she was perfectly motionless; pulse still 72. From this period the paroxysms were more regular, viz., one of jactitation and one of catalepsy every day till the 10th of January, 1835, about which time the catalepsy became less frequent, and the jactitation almost continual.

March 5th. Menses have returned in usual quantity. No other change.

April 8th. Jactitation continues, has intervals of quiet, which she spends in reading.

April 29th. On visiting her to-day, I find the fits quite altered in character, her chest and abdomen heaving alternately, each movement being performed upwards of 100 times in a minute; in other respects the catalepsy is as before; the fits were complicated with this heaving of the chest for thirteen or fourteen days.

May 14th. Catalepsy continues for one, two, or three hours at a time, without any appearance of regularity.

28th. Catalepsy less frequent, but jactitation almost constant.

June 6th. I read to her THE LANCET report of Mr. Ellis's lecture, containing Finn's case, and asked her if ever she had heard any speaking at her stomach; she remembered nothing of the kind; her mother promises to try it on the first opportunity; she is surrounded with pillows to prevent her being injured by toss-

ing in bed. During all her illness her urine had to be taken away by the catheter, and her food, drink, and medicine, to be passed by the stomach pump, which has been in daily use for the last twelve months. As this case is not likely to terminate for some time, I may communicate further with you on it, should anything worthy of notice occur.

Lurgan, June 18, 1835.

MERCURIAL OINTMENT IN ERYSIPELAS.

To the Editor of THE LANCET.

SIR,—I beg to forward the following case for insertion in your valuable and ably conducted journal. I am, sir, yours respectfully,

ALEXANDER WOOD,
Licentiate of the Faculty of Physicians and Surgeons at Glasgow.

Blue Vale, Glasgow, June 20, 1835.

April 19th, 1835. Mrs. M'M.——, ætat. 34, of spare habit of body, has had for eight days previous considerable swelling of the face, which now presents the usual characteristic symptoms of erythematic erysipelas, and the disease is complicated with typhus. Tongue brown in centre, but whitish towards the edges and tip; breath offensive; teeth covered with sordes; lips of a venous hue; pulse 100, compressible; short cough, with slight mucous rattle; tenderness over the epigastric and umbilical regions; pupils contract sluggishly to the action of light. Ordered Tapioca diet for two days. *Hirudines* viii, *applicatur ad venter. Ol. Ricini* ℥ss; *Fiat Haustus. Emplastrum Cantharides ad Nucham.*

20th, 8 a.m. Symptoms in general aggravated; swelling of face risen to a level on both sides with the ridge of the nose; eyelids completely closed and swollen, vesicles large and numerous; low muttering delirium; erysipelas fast extending over the region of the occipito frontalis muscle anteriorly, where it describes an arch so distinctly, that a line of very little breadth would form the boundary of diseased skin; pulse 94, intermitting. Ordered to smear the edge of the erysipelas on the forehead with *Ung. Hydrar. Fort.*, and to use the following injection, *Ol. Terebinth.* ℥ii; *Decoct. Hordei* ℥viii.

12th, noon. No perceptible change since the last visit; to continue the frictions over the edge of the erysipelas every two hours with the ointment. Repeat the injection.

6 p.m. The erysipelas has not extended on the forehead since the application of the ointment, which is now also to be applied to the whole face. Repeat the injection.

21st, 9 a.m. A very remarkable change for the better; vesicles flat; several times asked for a drink during the night; skin cool; pulse 90, slightly compressible. To continue frictions with the ointment. Two turpentine injections during the day. Allowed two ounces of wine in food.

8 p.m. Still improving; arched swelling on the forehead is visibly declining; the rest of the face is nearly the same as before. Continue the frictions.

22nd, 10 a.m. Slept calmly last night; is enabled to separate the eyelids (which are much less swollen) to the extent of a quarter of an inch or more; the swelling rapidly decreasing over the whole of the face; pulse 90, tolerably firm. Continue the frictions, repeat the wine, and administer one injection to-day.

23rd. She continues steadily to improve. Increase the quantity of wine in the proportion of half an ounce, until she takes as much as four ounces, should the symptoms continue to decrease, which they did up to the 27th of the month, when the cure was considered complete.

This is the first case which I have ventured to treat on the principle above detailed, but I have since had an opportunity of putting it to the test in two very severe cases, in females, the one where the fore-arm was affected, and the other the leg. The former, as I understand from the patient, had shown it to and received medicines from a number of surgeons, without deriving the slightest advantage from the treatment. Both of these cases were attended with the same happy results as that of Mrs. M'M. It is remarkable that the species of erysipelas (erythematic) which I met with in the first case, should have presented itself in so free, open, and airy a situation as it did; but I am induced to think that the remote cause was long and protracted grief, operating as a direct debilitant on the nervous system, which it must be allowed will act either in the ill-ventilated apartments of a city, or in the freer air of the country, though with greater frequency virulence in the former than the atter instance.

NEW METHOD OF

ARRESTING HEMORRHAGE FROM THE LARGER VESSELS.

Die Gefässdurchschlingung, &c. — The following account of an operation by Dr. F. B. Stilling, which the author seems inclined to prefer to the ligature and torsion, or any other hæmostatic means usually employed, is extracted from *Hecker's Annalen*, Vol. 1, No. 1, 1835.

A narrow slit is to be made through and through the parietes of the vessel, at some distance from the divided end, which is to be turned upwards, and then passed through the slits in the artery, so that the end should project about three lines beyond the anterior slit. The instruments necessary are, a common forceps, a compressor forceps, invented by the author (which he says resembles somewhat that of Graefe), and a bistoury. The artery to be operated upon being drawn down with the common forceps, an assistant applies the compressor forceps, at a distance from the end, which is at least double the diameter of the vessel, or a little longer if possible. This being done, the point of a bistoury, whose blade is turned towards the heart and is parallel to the axis of the vessel, is passed through the anterior and posterior parietes, midway between the two forceps, and is pushed forwards until an incision is made equal in length to the diameter of the artery; a forceps peculiarly constructed for the purpose is next introduced through the inferior slit, and made to project beyond the superior one, from one to three lines, according to the size of the vessel operated upon. The extremity of this forceps, which is thus introduced closed, opens by a simple mechanism; the extremity of the divided vessel is then turned upwards and placed between its branches: this done, the forceps is closed again, and the end of the artery is drawn successively through the superior slit, across the caliber of the vessel, and, finally, through the inferior incision. The compress forceps is now to be relaxed, and if no hemorrhage comes on, the extremity of the vessel may be abandoned to itself, and the operation is finished. In cases of a wounded artery, two compress forceps are to be applied, and the artery divided at the wounded point, when the operation above described is to be repeated for each extremity separately.

The author affirms that he has frequently tried this method upon animals, with the best results, and once upon the human subject. In the latter case, the patient, a cabinet-maker, had wounded the radial artery: the operation lasted three quarters of an hour, and the two ends of the vessel, when all was completed, presented an interval of nearly an inch. The wound united by the first intention, and the patient left the hospital on the 12th day.

CO-EXISTING DISTINCT CUTANEOUS DISEASES.

Last year we reported some cases, from the *Hôpital des Enfans Malades*, Paris, of the simultaneous existence of two distinct cutaneous diseases (small-pox and measles) in the same subject. This possibility has been denied by Underwood and many other writers, but in addition to the facts which we cited from actual observation, we may add the following from *Stifft's Medical Annual of the Austrian States*, Vol. 17, No. 2, 1835.

Case.—Gustave Hunteris, ten years of age, was seized on the 11th of March, 1832, with symptoms of inflammatory fever &c., which lasted to the 13th, when the papulæ of small-pox appeared on the face, arms, and hands.

14. No trace of vaccination can be seen; the patient complains of violent pain in the head; the face is very red; the tongue dry, rough, and trembling; the neck painful; deglutition difficult; skin dry and hot; pulse small and compressed. The spots now contain some whitish fluid, and the existence of small-pox is no longer doubtful.

Decoct. Althæ cum Spir. Minder. ʒij.

15. Pain of head; tongue less dry; deglutition less difficult; skin not so warm; and the fever more moderate.

16. (6th day) Fever moderate; tongue moist; deglutition free; colour of the skin between the pustules, normal.

17. Fever lit up again; child was seized with a shivering; great pain in the head; face swollen and very red; the throat painful; and deglutition now very difficult; great thirst; tongue dry; skin dry and extremely hot; of a deep-red colour over all the body,—this disappears upon pressure with the finger; fever very high.

Mixt. *Olcos*:—Warm emollient applications to the neck.

18. The symptoms leave no doubt of the co-existence of small-pox and scarla-

tina; great pain of head and vertigo; tongue dry and fissured; throat painful; whole skin of a deep-red colour as before; leaves whitish speck on pressure; pulse full and soft. Six leeches to the neck.

19. Vertigo; delirium during the night; deglutition almost impossible; breathing ralent; consciousness lost; skin hot and dry; very red; the pustules somewhat sunk, pulse very small, quick, and feeble.—Died at noon.

TORSION OF ARTERIES.

Some interesting observations on the torsion of arteries are reported from the *Hôpital Beaujon*, Paris, by M. Boyer, interne, in the *Journal Hebdomadaire*, No. 21:—While the torsion is extensively practised in almost every other country of Europe, it has been comparatively neglected at Paris; one or two trials are made there every now and then; but no series of observations has been followed up, if perhaps we except those made at the hopital Beaujon, by M. Blandin. The result of his experiments is recorded in the paper before us, containing ten cases of torsion practised for various accidents, and after operations, such as amputation of the testicle, the leg and the thigh. The smaller arteries operated on were, the spermatic, and several small branches opened during the removal of tumours; the largest were two crural arteries in the adult; the middle-sized were a posterior tibial artery, the three arteries of the leg in one child, and the crural artery in another child. In one case only (the first, scirrhus of the breast) the operation failed: in all the rest it was attended, so far as the arrest of blood is concerned, with complete success.

In case 6, the circular amputation was performed in the middle of the thigh, for purulent infiltration ascending from the neighbourhood of the joint: the femoral artery, the profunda femoris, and some small branches, were twisted. The hemorrhage was immediately arrested, and no subsequent discharge of blood took place up to the death of the patient on the 10th day after the operation. The femoral artery was completely obliterated inferiorly, for the extent of an inch, by a clot of blood, which extended upwards in a filiform manner, as far as the origin of the profunda: all the other arteries could be followed to the surface of the wound. In the second case of amputation of the thigh, death also occurred about the 10th day after the operation: pus was found in the lungs and liver; the saphena vein was inflamed; the internal tunics, which were pushed up by the torsion forceps, were also in a state of suppuration, feebly adherent to the rest of the parietes of the vessel, and supporting a small organized clot of blood, which closed the extremity of the tube. A circumstance of some importance to notice, which we may derive from the present cases, is the fact that the portion of cellular membrane submitted to torsion, is almost always destroyed by suppuration; and thus frequently opposes the union of the wound by the first intention; however, in one case, where M. Amussat amputated the thigh of a child, cicatrization was complete on the 6th day, and the wound never exhibited the slightest weeping of blood.

REPORT FROM THE HOSPITAL OF LA CHARITE, BERLIN.

The second number of *Rust's Magazine* for 1835 contains the conclusion of this report, of which we have already analysed the first part in a former number of The Lancet, vide No. 604, page 905. We proceed to present to our readers an account of its contents.

MENTAL DISEASES AND CONVULSIVE AFFECTIONS.

The number of patients treated were 337, viz.

	Men.	Women.	Total.
Remaining from Dec. 1831	66	69	135
Received during the year 1832	89	113	202
	155	182	337
Of these were cured	33	28	61
Partially cured	21	24	45
Without amelioration	13	16	29
Escaped	1	0	1
Transferred to other establishments	6	16	22
Died	24	15	39
	98	99	197
Remained	57	83	140

From this brief statistical view, we see that the proportion of those cured to the whole number is about 1 to 5½; partially cured, as 1 to 7½; unimproved, as 1 to 11⅔; and dead, as 1 to 8¾.

The number of patients treated for con-

vulsive affections was 66; viz., 30 males, 36 females. Of these were

Cured	8	9	17
Improved	9	9	18
Incurable	2	5	7
	19	23	42

The greater part of these patients laboured under the various forms of epilepsy. The treatment of the disease was principally guided by a reference to the predisposing cause or state of organization with which it was supposed to be connected. In some cases the convulsions were partial, came on suddenly, and seemed to have been produced by exposure to cold. Here anti-rheumatics were preferred to any other remedy. In young children the discharge of worms was often attended with the best consequences, and in others the convulsions seemed rather to depend on some deranged development, or an imperfect menstruation in young girls. In the former case the employment of properly directed exercise was efficacious, and for the young girls the use of the circular swing, peculiarly destined for the mad patients, frequently re-established the menstrual flux, and thus cured the epilepsy. The most difficult and fatal form was that depending upon excess in venereal pleasures, onanism, and, finally, upon some organic disease of the brain or spinal marrow.

When the precise cause of the convulsions could not be ascertained, or when they seemed to depend upon disordered function of the nervous system alone, recourse was had to narcotic and antispasmodic remedies, or to certain medicines regarded as specifics. It must, however, be remarked, that the efficacy of those means can never be depended upon for the radical cure of epilepsy. In many cases patients treated in this way, who had remained in the hospital for several months without any fit, and in the regular exercise of all their functions, after having been discharged, returned again after a few days with the original disease, often a more aggravated form. The remedies found most efficacious were the *lapis infernalis* and *nux vomica*. The first was employed during three months in the case of a servant twenty-seven years of age, who from the age of seven years had been affected with epilepsy, without any known cause, but probably from unnatural habits. At the end he took nine grains a day, and in all 160 grains, without suffering the slightest inconvenience. The epileptic fits, which in the beginning attacked him several times a day, towards the end appeared only once in six or eight weeks, and then in the form of slight convulsive motions. The patient remained in this state for a year, without any other appearance of the disease than the contractions alluded to.

The *nux vomica* was employed in several cases, and especially in that of a young woman, twenty-two years of age, who suffered not so much from epilepsy, as from sudden attacks of opisthotonos, followed by sopor of several hours duration. The general health was good, and the catamenia regular. Together with the extract of nux vomica, strychnine was employed by the endermic method: the means were attended, after some time, with beneficial results; the tetanic state lasted only a few minutes, and the fits were separated by a much greater interval.

LYING-IN WARDS.

Remaining from December 1831	22
Delivered in the hospital	249
Ditto outside	11
	282

The number of children born was 252, 135 boys and 117 girls,* or as 1.16 to 1. The first position of the head was observed in 183 presentations, the first position of the breech in three, and the transverse position in five. In all except a very few cases, the placenta came away within from five to twenty minutes after the child's birth. In 220 cases, labour was completed without any assistance, except the support given to the perineum; in 24 the forceps was applied, and in five cases version; hence the proportion of natural to artificial labours was 220 to 29; nearly as 7.6 to 1.

* From a comparison made in France of more than fifteen millions of births, it would appear that the proportion of males born to females is as 17 to 16.

The diseases and accidents which complicated the patients' state after delivery were very numerous; thus we find 24 cases of uterine hemorrhage; 11 of metritis; 10 of puerperal fever; 2 of puerperal mania; 51 of various febrile affections; inversion of the uterus 1; putridity 1; mastitis 12; rupture of the perineum 5.

The frequency of inflammatory and febrile affections after delivery depended upon an epidemic constitution; and metritis was generally the result of artificial labour. Puerperal fever occurred under such different circumstances and times, that it was impossible to refer it to any epidemic cause.

The following were the most remarkable affections of the new-born children. Asphyxia 15; icterus 30; endurcissement of the cellular tissue 13; inflammation of the eyes 37; aphthæ 22; convulsions 5; pneumonia 3; eclampsia 3. Twenty-three children were born dead, and 30 died during the convalescence of the mother, viz., convulsions 5; eclampsia 3; apoplexy 1; pneumonia 3; endurcissement 9; atrophia 7.

On comparing the several numbers of births, deaths, diseases, &c., we obtain the following proportions:—Births, to number of deaths and children born dead, 252 : 53 = 4.8 = 1; births to children born dead, 252 : 23, or 10.95 : 1; births to deaths soon after birth 252 : 30, or 8.4 : 1.

The following case is remarkable:—

Case of Twins, one presenting the Colour and Form of a Mulatto.

Ch. A., 22 years of age, was delivered, on the 25th of January 1832, of two female children, seven months old. The second was immediately distinguished from the first born, by a peculiar blue-gray colour of the face, hands, &c., and drew the attention of its mother, who exclaimed "I thought so."

In size and weight both children resembled one another, but the head of the second child was much more flattened at the sides; the forehead was low and compressed; the eyes were more distant from one another; the lips thick, the nose broad, and turned up; the colour of the face, hands, and feet, resembled that of a person who had taken nitrate of silver; it was also remarked that the umbilical chord of the first child was white, while that of the second was dark.

Both died a few hours after birth, and were presented to the Royal Museum by M. Rudolphi.

On being questioned, the mother would give no information about the children, but some time after confessed that she had "gone to see" a black in the month of October past. However, it was discovered that for a long time previous to January she had been a domestic in a house where a negro was in the habit of constantly going.

The number of children treated during the year in the hospital was 168; of these were cured 61; improved 18; not cured 13; died 34; hence the proportion of the cures to the whole number was as 168 to 61, or 2.75 to 1; of the deaths to the whole number as 168 to 34 or 4.9 : 1.

Lithotomy.—The operation of lithotomy was performed by Professor Dieffenbach upon a female infant three years of age; who since her arrival had suffered constantly from pain in the region of the bladder: the sound discovered the existence of a hard stone, as large as a good-sized hazelnut. The operation was performed by M. Dieffenbach, but the stone was not removed before nearly the lapse of an hour. It was very hard, oval, and one inch long by half an inch broad. The patient died the next morning, and on examination the fundus of the bladder was found adherent to the peritoneum, which was inflamed. Several portions of the bladder where the stone had evidently adhered were inflamed, and it contained a gray purulent fluid.

Scrofula.—A great proportion of the cases received into the hospital being of a scrofulous habit, iodine was administered according to Lugol's directions. It exercised an evidently beneficial influence on the organs of the reproductive system: the appetite was not only improved, but also digestion and nutrition; a circumstance however worthy of remark was, that all the patients assumed a pale tint of countenance even when they were originally fresh-looking and ruddy. The suppuration of the glandular abscesses was evidently hastened by the use of

iodine, but the hard glandular swellings were not resolved more rapidly. On the whole, from the experiments made at this hospital, iodine does not seem to deserve the high reputation as an antiscrofulous remedy, attributed to it by LUGOL and KURTZ. Experience shows that hardened glands and tumours pass more readily into suppuration and ulceration after the use of iodine, and a similar change may possibly take place in the pulmonary and mesenteric tubercles.

A child, 12 years of age, after a fall on the head, complained during twelve months of vertigo and nausea, which finally terminated in a delirium, inflammation of the brain, and the symptoms of hydrocephalus; he was brought in this state to the hospital, and died in a short time. The right cerebral hemisphere and nearly the whole cerebellum were studded with tubercles, similar to those found in the larynx of phthisical patients.

The number of patients treated in the establishment for the small-pox cases was 96; of these were cured 81, died 11, remained 4. The proportion of deaths to the cases was therefore as 11 : 96 or 1 in 8.72.

RE-VACCINATION.

The number of Rust's journal from which we have extracted the foregoing details, contains the following particulars relating to re-vaccination, which we extract from a circular addressed by the physician-general of the Prussian forces to the army-surgeons in the year 1833:

1st. Number of persons vaccinated, 48,478.

2nd. Of these had traces of former vaccination, 37,286; doubtful, 7641; scarcely any trace, or none, 3551.

3rd. The vaccination and its effects were regular in 15,269 cases; irregular in 12,203; without any effect in 21,006 cases.

4th. The individuals in whom the vaccine did not take were again re-vaccinated with effect in 784 cases; without effect in 3377.

5th. The number of re-vaccinated soldiers attacked during the course of the year with pocks was fifty-four varicella, fifty varioloid, true small-pox, twenty.

INDIGO IN EPILEPSY.

The third number of Rust's magazine, 1835, contains—

1st. A Paper on the use of Indigo in Epilepsy, by Dr. Ideler.

2nd. An Account of the Progress of the Cholera in the circle of Dusseldorf in 1833.

3rd. A Description of a new Machine for Club-Foot, by Professor Seering.

1. INDIGO IN EPILEPSY.

We have already noticed in a general manner the results obtained by Dr. Ideler in epilepsy, with indigo administered internally. The present paper, besides some general considerations upon the nature and cause of epilepsy, contains seven cases of this disease in which indigo was employed with more or less benefit. The first will give a good idea of the effect which it produces upon the economy at large, and more particularly upon the disease in question.

Case.—A. S., thirty years of age, was seized about the age of puberty with a violent attack of epilepsy, probably in consequence of excess in venereal pleasures. The disease disappeared for a space of six months, and then returned on the patient's being exposed to the action of cold. The fits occurred several times in the day, and continued for a month at a time, to return again at uncertain intervals. The precursory symptoms were, as at the present moment, either totally absent, or lasted a couple of minutes, and consisted in vertigo, noise in the ears, and some confusion of the head. After the convulsions had lasted a quarter of an hour, the common soporose stage came on, and this lasted about half an hour. The patient seemed to enjoy general good health, and although the disease had lasted ten years when he was brought into the hospital, his intelligence had not suffered any diminution. He had been six years in the establishment, and during that time every remedy imaginable had been employed, without producing any result worth mentioning. This was the first patient upon whom M. DIEFFENBACH experimented his method of injecting medicinal substances into the veins,

with the object of bringing on general fever. A solution of four grains of tartar emetic had been thrown into the veins with no other effect than that of exciting fever and a very acute pleurisy, which however was reduced by an energetic antiphlogistic treatment. After convalescence the epilepsy resumed its former violence; moxæ were afterwards applied to the neck; the preparations of copper and other powerful remedies introduced by the endermic method; all without benefit. The convulsions returned every month with the same force and frequency. The patient was now allowed to remain quiet for some time, and in December last began to take the indigo internally.

The first effect of this remedy was to produce a number of liquid stools, four to six in the day, without any colicky pain, or heat about the anus: the digestive organs however did not suffer, and the patient continued its use until the middle of January, when some symptoms of disordered intelligence began to manifest themselves; the pulse now became feverish, but these accidents were dissipated by a bleeding from the arm, and the use of cooling medicines. The indigo was now suspended, and not given for a few weeks, when the patient had recovered from the delusion of mind under which he suffered. The purging was now slighter than at the commencement, and the matter discharged presented the colour of indigo, and the urine was of a brown hue. During the first months the epileptic fits came on more frequently, once every three or four weeks, but since the summer they appeared only at intervals of seven weeks. The following result was however of more importance:—At an early stage the patient suffered from frequent attacks of vertigo, the sure forerunner of an epileptic paroxysm. These attacks were altogether removed by the use of the indigo, and the patient's state so much improved as to leave some hope of ultimate recovery.

This case, though not a decisive one, shows at least how much the disease was modified by the use of indigo and the effects of the remedy. They were the same in all the other cases—viz. nausea and vomiting at the commencement, which were assuaged by the pulvis aromaticus, then diarrhœa, continuing during the whole time of its administration without the patient losing strength, or any derangement of the digestion. The urine, not secreted in greater quantity than usual, presented a peculiar brown colour, but its chemical qualities, according to the experiments of MM. Roose and Hirschberg, were not altered.

These were the only effects worthy of notice produced by this remedy which was given in the form of an electuary, containing half an ounce of powdered indigo. The patient took this quantity at first in two days, then in one; or, when a greater effect was desired, from six to eight drachms were given during the twenty-four hours.

In the following case the indigo was employed with decided advantage:—

Case.—M. H., twenty-one years of age, enjoyed excellent health until the age of twenty, when, in consequence of cold applied to the feet, her menses became suppressed, and some symptoms of hysteria set in; the menstrual discharge was brought back by proper treatment, but the nervous system remained disordered; there was periodical headach, vertigo, noise in the ears, &c. These became suddenly aggravated in the month of July 1833, and the patient was now evidently epileptic; the fits at first came on every week, then every four days, and in September were repeated three, six, or even eight times a day. The patient was received into the hospital on the 1st of October; her menstruation had now been regular for the last two months. The treatment at first consisted in the use of derivatives and purgatives, under which the fits became somewhat less frequently repeated. On the 22nd of December the patient commenced taking the indigo: an ounce of the powder with a drachm of aromatic powder, a teaspoonful three times a day. The next day she had six fits, excessively violent, but of shorter duration than usual; the soporose state continuing only a few minutes. During the use of the remedy for the two following weeks the fits occurred more rarely, and on the 14th of March were perfectly cured. Five months afterwards inquiries were made, and her health was found to be excellent.

The origin of the epilepsy in this case was not very clear; the disease did not commence at the age of puberty, and its connexion with the suppression of the menses seems very doubtful, as the fits

continued in full force two days after the discharge was re-established. The beneficial effects of the indigo were immediately felt on its administration, and the cure was completed in less than three months. We can only find room for a very brief analysis of one or two more cases.

Case.—E. H. tailor, thirty years old, attacked without any appreciable cause; the first fits every fourteen days; gradually became more frequent, and at last came on three times a day. Came into the hospital on the 11th of February; on the 25th began taking three spoonfuls a day of the indigo powder; no vomiting or purging produced. On the 28th the fit was much less violent, and the dose raised to one ounce per day. Colicky pains, loss of appetite and purging; up to the 11th of March, some slight epileptic convulsions continued, but after that time disappeared. The indigo was continued to June, in order to confirm the cure, which was not disturbed by any accident or relapse.

Case.—C. E., twenty-eight years of age; weak, ill made; subject to convulsions in infancy, which disappeared when the menses were established; the latter, however, were suppressed during the last three years, from exposure to cold; their suppression was immediately followed by epileptic fits; came into the hospital 19th September, 1833. For a few months the treatment was entirely directed to bring back the menstrual discharge, and the convulsions appeared once every month. In December the indigo was employed, and continued without interruption to the 17th of April 1834, when the patient was discharged, as no convulsive movement had been observed for four months.

It is unnecessary to analyse any more of the cases contained in the memoir now before us; they resemble the above in their general features, and do not present anything particularly worthy of notice. The general result of the cases treated by Dr. Ideler was as follows: treated 26; completely cured (no relapse) 6; not at all relieved 6; essentially relieved 11; cured for some time, but suffered relapse from exciting causes, 3.

THE LANCET.

London, Saturday, July 4, 1835.

On Tuesday next the County Coroner's Bill will be considered in a Committee of the whole House, on which occasion the clauses will be read and discussed *seriatim*, and it is probable that the examination of the measure preparatory to the third reading will be completed on that occasion. It is of importance, therefore, that those members of the profession who have any suggestions to offer, or objections to make, relative to this Bill, should forward them without delay to their friends and representatives in the House of Commons. The Bill in many respects is much improved, but should it pass in its present shape, it will, even now, disfranchise an enormous mass of electors; because it proposes that no persons shall vote at elections for county coroners, except those persons who are registered as being qualified to vote for knights of the shire. This is an innovation on the rights of the community which ought not to be suffered, and which we hope will not be allowed. However, it is not our object to discuss the general provisions of the Bill, but to call the attention of the profession to the 12th clause, which stands as follows. It is this clause which is particularly noticed in the Sunderland petition inserted at page 457 of this week's LANCET:—

"And whereas at the taking of inquisitions on the bodies of persons lying dead, it is frequently necessary, for the more satisfactory explanation of the cause of the death of such persons, that a post-mortem examination of such bodies, or of some part thereof, should be made by some surgeon or other person of the medical profession, and his evidence given on such examination; and whereas there is at present no remuneration provided for such surgeon or other person, whereby great difficulty exists in procuring such post-mortem examination to be made; be it therefore enacted, that in every case

where the assistance of any such surgeon or other person for the purpose of such post-mortem examination, and his evidence thereon, shall be thought necessary and required by the coroner and jury, the constable of the parish or place in which such inquest shall be held shall, on the direction of the coroner, pay to every such person, if he shall require it, a reasonable fee (such fee in no case to exceed the sum of *one* pound), before he shall be called upon to give his evidence; and such sum so paid by the said constable shall be reimbursed to him out of the funds provided for the relief of the poor of such parish: provided always, that such remuneration shall not be given to any such person where he shall be called upon only to give evidence as the medical attendant of such deceased person during his lifetime, or at the time of his death."

The alterations which it appears to us should be made in this clause are to the following effect:—First, that a surgeon on being summoned as a witness, should be authorized to decline attending unless he be paid a fee of one pound when summoned as a witness merely.—Secondly, that should a post-mortem examination be instituted, the Coroner should be empowered and required to pay to the surgeon not less than two pounds for making such examination, in addition to the one pound paid to him for his attendance. These alterations, if they would prove advantageous to the profession, certainly would not involve an expenditure of what would amount to the value of the services to be furnished by the witness, as in nineteen cases out of twenty the medical witness constitutes in himself the only important functionary in the ceremony. He is the BE-ALL and the END-ALL of the Inquest. Without his aid the coroner and jurors can know nothing, and they would by their ignorance retard rather than facilitate the course of justice. If, therefore, the members of the profession resident in and about the metropolis, feel any interest in reconstructing those portions of the above clause to which we have adverted, we entreat of them to make the best use of their time between this period and Tuesday next, in entreating their friends in Parliament to support a proposition for the payment of a proper fee to medical practitioners when they attend as witnesses, and to urge the propriety and justice of awarding to every surgeon the sum of at least two pounds when he is required by a coroner to institute the examination of a body post-mortem.

Mr. GUTHRIE, we understand, is loud in his complaints against THE LANCET, because that journal has communicated to the profession the substance of his evidence as it was delivered before the Medical Committee of the House of Commons, and exposed its crudities, its inconsistencies, and its violations of professional decency. Mr. GUTHRIE would deal more justly by us and by the public, if he would direct his complaints against himself, for having disgraced the profession by uttering such impertinent trash,—at once an insult and a libel against the character of his professional brethren. When the President of a medical College can speak as Mr. GUTHRIE has spoken before the British Parliament, it is high time that the institution over which he presides should cease to exist.

BY-THE-BY, will some ingenious defender of the dispensary system take the trouble to explain to us how it happens that certain medical gentlemen do not feel at all aggrieved at bestowing their time and services gratuitously in dispensaries and infirmaries, while they are in arms against the Poor-Law contract system, and the refusal of remuneration in the Coroner's Court. If the reason to be offered is simply this, that infirmaries and dispensaries serve as puff-shops for those who work within, we desire to be spared the corre-

spondence. Professional men fly with an ill grace to Parliament for relief from the one grievance while they warmly foster the other. The time however approaches that will witness the explosion of the present degrading and disgraceful medical-*charity* system, and the contrast which late circumstances have especially forced the profession to make between the support of, and the movement against, non-remunerating customs, will hasten its arrival. The eyes of the profession are everywhere opening to their true interests, and certain it is that medical practitioners will not much longer complain of a four-shilling pittance for twelvemonths medical attendance on a parish patient, without combining to abolish the farthingless attendance on gentlemen's lacqueys and other subscription-ticket gentry at the drug-stinking dispensaries and infirmaries which afflict humanity at the corner of every street in in London and every town in the kingdom.

An intimation was conveyed a short time ago to Sir Henry Halford, as head of the National Vaccine Board, that a "reform" must be effected in the pay and arrangements of that establishment. Sir Henry's office is a highly paid sinecure. So is the office of the cormorant Hue. Did Sir Henry, therefore, at once propose compliance with the hint by paring down his own annuity, and that of his co-fellow? Oh no. He wrote forthwith to the working men in the Board, and gave them to understand that economy would begin its work amongst *them*, and there he designed it to end. Foolish old man!

A paragraph appeared in the *Sunday Times* of June 28, purporting to give an account of the refusal of a physician to go into the country to visit the late Mr. Cobbett, until he was *first* paid the sum of *thirty guineas* for his visit. If the word *surgeon* be substituted for *physician*, the statement will be nearer the truth. We will give a fuller explanation of this scandalous circumstance on an early occasion; but we may remark now, that this liberal practitioner was at one time the *personal friend* of Mr. Cobbett, who, up to the period of his last illness, did not know that the apostate in religion and politics was any other than his kind and consistent well-wisher.

We lately announced that the medical practitioners resident in Buckinghamshire and the towns on its borders had formed a society under the name of the "Buckinghamshire Medical Association," with the professed object of "upholding the respectability and maintaining the general interests of the profession." At a meeting of the Society held at Aylesbury, it was resolved, "That the injurious tendency of the new arrangements adopted by many of the Boards of Guardians to procure medical attendance for the sick poor, should be made known in a memorial addressed to the Poor-Law Commissioners," of which the following is a copy:—

"*To the Commissioners of the Poor Laws in England and Wales.*

"Your memorialists beg to express their unfeigned concern, that no adequate provision has been made to secure to the poor in sickness efficient medical aid.

"Your memorialists request to be permitted to state, that for some years past, in too many instances, the mode of obtaining by the authorities parochial medical assistance (dictated by spurious notions of economy, and responded to by many practitioners from various motives), could never in itself justify, on the one hand, the expectation of success, or induce, on the other, the hope of adequate remuneration; but, by promoting vicious competition, opposing interest to duty, and affording only a contingency where a certainty should be secured, was no less objectionable in principle than pernicious in practice.

"Your memorialists respectfully submit, that the measures recently adopted by many of the Boards of Guardians to procure medical and surgical attendance and medicines, are still less calculated to

effect the end desired, and must terminate in injury and disappointment.

"Your memorialists are satisfied, that in many of the unions the inconvenient appropriation, and the inadequate division of the medical duties, will render them considerably more laborious, and infinitely more difficult of execution, which, added to the other impediment in the way of obtaining early attention, must, not unfrequently, be productive to the sick of serious, if not fatal consequences; and your memorialists confidently assert, that the rate of payment proposed is altogether disproportionate to the services required of the medical attendant, and appears to them to have been conceived in total disregard of his social claims, and without the slightest consideration for his moral and legal responsibilities.

"Your memorialists beg further to state, that, under the conviction that those arrangements and proposals are calculated to inflict injustice on the poor, injury on the public, and degradation on the medical profession, they cannot avoid earnestly, but respectfully complaining, that the alternative of submitting to the introduction of strangers,—necessarily ignorant of the nature and extent of such onerous and ill-requited duties, which has been threatened in many instances, and executed in others, is a measure of unmerited harshness and unprovoked oppression.

"Your memorialists presuming that it was the intention of the Legislature, and that it must be the desire of the Commissioners, to render the administration of the Poor-Law Amendment Bill beneficial to all, and oppressive to none, respectfully and confidently hope, that they will take into their earliest consideration the whole of the subject, institute the fullest inquiry into its bearings on all parties, and originate and direct such specific and permanent regulations, as shall be beneficial to the sick poor, satisfactory to the public, and fair and just to the medical profession."

(Signed on behalf of the meeting),

"ROBERT CEELY, Chairman."

The adoption of this memorial is a measure preliminary to the presentation of petitions on the subject to both Houses of Parliament. It is right to address the Legislature on the subject; but again we repeat that every step, whatever may be its direction, is useless, if union against the source of grievance do not prevail, and be not inviolably maintained in the profession. Parliament may grant general powers to the Commissioners on this subject, but dictation to the profession as to how much they shall labour for; or, rather, *how little* they shall consent to receive by way of remuneration for their services, is impossible. The profession must decide that point amongst themselves. The Court of a NATIONAL FACULTY OF MEDICINE may move with success where statesmen cannot tread, but until that Faculty is erected in this country, on a just and efficient basis, spontaneous union and a common consent must prevail amongst medical men wherever the cruel directions of the Poor-Law Commissioners are intruded.

AFTER distributing the prizes to the pupils in the Faculty of Arts at the London University on Saturday last, Lord BROUGHAM made some observations on the Medical School of the Institution. He said "that it was unquestionably the most flourishing and best attended in this country; none could rival it in the number and assiduity of its pupils, or the talent and industry of its professors, and the other departments of the University were slowly but surely improving, Professors of eminence and exemplary diligence having been appointed in all of them. With regard to the possession of a charter, he could positively inform them that one would very shortly be granted, whatever the enemies of the Institution might say to the contrary." We do not take the *dicta* of non-professional gentlemen, and rarely of medical men themselves, on such points as those noticed by his lordship; but in this instance we believe that Lord BROUGHAM has pronounced a correct judgment on the state of the institution. Why, however, did not his lordship procure the opportunity of announcing the concession of a charter, while he himself held the seals of office? We cannot readily forgive him this neglect. Is the King driven into a closer corner now than he was under the GREY-and-BROUGHAM administration? Whether he be or not, his present position is no juster than it might have been in those days when Lord BROUGHAM became a shoy-hoy at the orations of the eel-backed Baronet in Pall Mall East. Of course the charter will

not confer the power of granting licenses to practise medicine.

One wing of the North London Hospital is to be erected immediately, the late subscriptions being large enough to cover the expense. Although we do not regard great hospitals as essential to the perfection of medical education, yet the attendance of medical students is likely to be so abundant at this Institution, that we are glad at the increased means of judiciously distributing the attention of pupils in the wards.

THE case of catalepsy recorded (to such extent as it has as yet advanced) at page 413 of this week's LANCET, is one of a most singular character, from its complications with pregnancy, jactitation, and a heaving of the chest and abdomen, the protraction of the fits, and the long sustentation of nutrition through the agency of the stomach pump. We should have been glad if Dr. HANNAY had stated at the close of his remarks, his impressions as to the period of conception. The patient was married in October 1833, was attended by a medical practitioner under the expectation of a speedy delivery in the middle of June 1834, and bore a healthy child on the 23rd day of the month of October following. At the date of the last report of the progress of the case, the catalepsy still persisted, though it was "less frequent; the jactitation, however, being almost constant."

INTERCEPTED LETTERS.

"DEAR SIR BENJAMIN,—It grieves me most exceedingly that an express from Kensington Palace will unavoidably prevent me from enjoying the high gratification I had anticipated in being present at the stripping of the mummy. Your talents have contrived a most admirable occasion for opening your new School of Medicine. It would afford me excessive pleasure if you could order any one of the best writers on our Journal to draw up an account of the interesting phenomena, whether vital or physical, which the dissection of the mummy may bring to light, that I may have it read at the next College meeting, for we run very short of papers. Excuse this hasty note, though I must find time and room to beg that you will accept of my warm and hearty congratulations and good wishes for the success of your new building. I am the more earnest in the expression of these wishes, because I am fully aware of the high feelings which have caused you to embark in so expensive, thankless, and I fear profitless a speculation, and of the difficulties which men, who are eager in the diffusion of knowledge, like yourself, have in realizing anything like a moderate pecuniary recompense for all their outlay and their numerous cares. Whatever gratification the establishment of this new company may afford you as a scientific man, I much fear that you will not realize one per cent for your money.

"Ever Yours, H. H.

"May Fair, Wednesday morning.

"P.S. I shall take occasion to congratulate the public and the profession generally on the happy prospect of your being induced to resume your valuable lectures, which you had, unfortunately for medical science, resigned for some years past; lectures which for the perspicuity and elegance of their composition, their profound research, the originality of their views, their acumen, the eloquence of their delivery, their everything else in short, which is desirable in lectures,—have never been surpassed, seldom equalled."

"DEAR DR. TURNER,—Although it is probable that Sir Benjamin has sent you an invitation to attend the opening of a mummy at his new building, it is my wish that none of the Fellows of our College should attend, as I have just learned, for certain, what indeed I had suspected was true, namely, that it is one of the little baronet's jobs, and that nobody will be present but the members of his own clique at *St. George's*, a herd of subordinates, his immediate dependants, along, no doubt, with some of the tag-rag of the licentiates.

You know my dislike of every species of quackery, and how deeply its indulgence affects the respectability of our profession; and had Sir BENJAMIN only come openly forward to revenge the wrongs done to him by his opponent at the hospital, and manfully declared himself the projector, proprietor, and upholder of a new school, how much more respectable would it have been than working like a mole under ground! He might then have got some of the respectable portion of his brethren to have joined him, in place of the lame and decrepid coadjutors on whom he must now rely. Indeed, it always has appeared to me to be a mad scheme altogether, as

there is no opening for anything like a new establishment. The number of pupils they were able to congregate when they were all pulling in the same boat, was too small to enable them to make, as Mr. GUTHRIE said, a commonly decent appearance in society. What will it be when split in two?

"Ever yours, H."

"May-fair, June 30th."

"DEAR SIR HENRY,—I regret that I did not receive your letter in time to prevent me from attending the opening of the mummy in Kinnerton-street. Except myself there was scarcely a respectable and independent member of the profession present; but I do not regret going, as it turned out to be a fine intellectual comedy. You would notice in your card of invitation, that the mummy was presented to the school by no less a man than Sir FREDERICK FITZCLARENCE, but on inquiring I found that, like BRODIE's other trickeries, it had not been presented to the school at all, but that Lord FITZ had given it to BOBBY KEATE ages ago. This chicanery is, therefore, a bad start. T."

REMUNERATION OF MEDICAL MEN AT INQUESTS.

To the Editor of THE LANCET.

SIR,—The following is a copy of a petition which is to be presented to the House of Commons against a clause in the Coroner's Bill, which it is believed would tend to the injury of medical practitioners.

I am, Sir, your obedient servant,

J. M. PENMAN.

Sunderland, 29 June, 1833.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Humble Petition of the undersigned Members of the Medical Profession resident in the borough of Sunderland,

Sheweth,—That your petitioners have read with regret the twelfth clause of the Coroner's Bill now before your Honourable House, which clause limits the remuneration of medical men to one pound, for performing a post-mortem examinination, and denies them any remuneration for their professional evidence.

That the performance of post-mortem examinations is in many cases attended with great danger to health and life (and several of your petitioners have suffered severely from making such examinations), and after exhumation the service is peculiarly unpleasant and disgusting.

That with regard to professional evidence, not connected with post-mortem examinations, your petitioners beg to remind your Honourable House, that it is the peculiar lot of medical men to be immediately summoned on the occurrence of accidents and sudden illness (a refusal to accede to which summons would be stigmatized as the grossest inhumanity), for which, if the cases terminate fatally, they seldom receive any reward; whilst by this very compliance with the demands of humanity, they become liable to be called upon for further sacrifices of their time in giving unremunerated professional evidence at a coroner's inquest; that these duties press much more heavily on medical men than the simple office of witness does on other classes of the community. Your petitioners further submit, that there is a wide distinction between the evidence and opinions of professional men on the one hand, and the mere casual evidence of bystanding citizens on the other; that although the latter are not rewarded for their casual evidence, it is but right that medical men, whose education and skill (like those of lawyers) are intended for their maintenance, should be remunerated when professionally employed and consulted.

That, lastly, it appears from the abovementioned clause, that any medical man is liable, at the summons of a coroner, to be dragged from his home, however inconvenient it may be, compelled to perform an examination, however unpleasant or dangerous, and then to give his professional opinion on the case; and that independently of the inadequate remuneration, the compulsion to qualify himself as a witness in the first instance, in order to give evidence, is an unparalleled breach of the liberty of the subject.

Your petitioners, therefore, humbly submit the propriety of fixing one pound as the minimum instead of the maximum fee for post-mortem examinations; to admit of increase at the discretion of the coroner, according to the circumstances of the case; and that in all cases where medical men are summoned to give professional evidence at a coroner's inquest, whether or not they may have made a post-mortem examination, their professional services shall be recompensed.

And your petitioners will ever pray, &c.

(Signed by twenty-nine physicians and surgeons.)

TAPPING IN HYDROCEPHALUS.

To the Editor of THE LANCET.

SIR,—The paper published in your valuable periodical of the 27th instant, entitled "Hydrocephalus unsuccessfully treated by Tapping," is written in a very candid manner; but the deductions, I think, are not fair inferences from the premises, because the performance of the operation on which ultimate success so much depends, certainly was not so accurately attended to as the case required. The puncture was made with a common lancet, a little to the left of the great longitudinal sinus, and after a portion of fluid was evacuated, the lips of the wound were found to offer an impediment to the free exit of the fluid. The wound healed, and the lancet was again resorted to, not more than a few ounces of water coming away. In the course of a week the child died, and we are then told that *a lancet* is by no means a good instrument for performing the operation, as the least motion on the part of the child, may disturb the lips of the wound, and entangle the edges of the dura mater in the outer opening, or divert them from the exact line of communication! And although the operation was performed with this improper instrument, we are to infer, that even the most temporary relief is not to be expected, in the majority of cases, from its performance. Now, sir, from the success which I have witnessed in cases where the operation has been performed, not with a lancet, but with a small trocar, when the quantity of fluid to be abstracted could be regulated according to the discretion of the operator, and not according to that of the dura mater (never being contented with removing a few ounces only, when it was essential that more should be evacuated), it does appear to me that we are not justified in decrying an important operation, which does at all events remove an effect, when perhaps the cause may have ceased to exist; or at all events affords the practitioner a better opportunity of administering his remedies, the unnatural pressure on the brain being removed. I trust ere long to have an opportunity of detailing some practical proofs that tapping in hydrocephalus is not altogether useless. At all events, let me request that you, sir, and the medical public will, for a short time, suspend your judgment on this operation.

I am, Sir, yours respectfully,

M.

London, June 29, 1835.

CANCRUM ORIS.

To the Editor of THE LANCET.

SIR,—Although a stranger to both parties, I have lately observed with regret the controversy carried on between Mr. Hoare and Mr. Vicary. I use the term "regret" because great pains have been taken to show that the child died from the effect of mercurial salivation; and it has been as strenuously asserted that the mercury taken was not likely to produce fatal ptyalism.

The fracas strongly reminds me of the two Knights who fought about a Shield. If the disease was not caused by the action of mercury, what then was its real character? This question (and it is an interesting one) seems to have been overlooked. I am well aware that such diseases are generally considered by our metropolitan hospital functionaries, as the consequence of mercurial action occurring under certain cachectic states of the system; but our metropolitan hospitals have long since ceased to be the oracles of the profession, and, like Friar Bacon's Brazen Head, they can now only sorrowfully ejaculate "The time's past."

My attention was first drawn to this destructive inflammation of the mucous membrane of the mouth and fauces, by Dr. Whiting of the *Surrey Dispensary*, a gentleman of very comprehensive mind, and I have seen it occur in various states where mercury has and where it has not been administered; it is termed "Cancrum Oris." In a work published some few years ago by Dr. Hamilton, (of Lynn Regis?) one of the best practical physicians of this or any other country, the doctor ably describes the disease, with its appropriate treatment, and to this book I beg most respectfully to refer Mr. Hoare and Mr. Vicary, for the purpose of amicably settling their quarrel. Its perusal, indeed, would benefit the profession generally, the disease being little known and still less understood. I am, sir, your humble servant,

J. TAYLOR.

Old Kent-road, June 29, 1835.

CONCENTRATED INFUSIONS.

To the Editor of THE LANCET.

SIR,—A former communication of mine was published by you under the signature "S. G." in answer to a paper in THE LANCET of April 18th, signed "J. T." In speaking of "Bass's Concentrated Infusion of Senna." On that occasion, I did

not mean that its purgative effects were inoperative, but only that a given quantity of the Infusum Sennæ P. L. will act with more energy than the concentrated infusion (after the separation of a portion of its cathartine) diluted in the usual manner. My communication appears to your correspondent "very erroneous, and so far from just," that he firmly believes that the Inf. Sennæ is the only one good for anything at all; after which he states that he has "cause to know that almost the whole of the bitter concentrated infusions, as usually prepared, have their flavour given them by the bitter principle extracted from "Quassia and termed by Dr. Thomson Quassin" (alias Quassine). Will your correspondent inform us from whence he obtained his information, and should he favour us with a rejoinder, confine his observations to Mr. Bass's preparations, which were exclusively mentioned in the paper referred to; for although there are others, of their comparative merits I plead ignorance. Lest it should be thought that I have some interest in preferring the infusions of Mr. Bass, I beg leave to state that we are perfect strangers, and I hope that the serious charges brought against the said concentrated infusions will meet his eye and be satisfactorily refuted, or that he will deny the *ipse dixit* of the pharmaceutical assistant of the St. Marylebone Infirmary. In regard to the infusions of orange-peel and gentian, the only bitter infusions referred to by this latter gentleman, it would perhaps be a fair test of his delicate taste, if blindfolded he could point out which of the two kinds is the "less grateful and pungent." As to what is said of *Decoctions* &c., I am at a loss to understand what they have to do with *Infusions* in the strict sense of the term. I am, sir, your obedient servant,

W. S. G. Davies.
Surgeon, R. N.

Brighton, June 27, 1835.

LETTER FROM DR. CLANNY.

To the Editor of The Lancet.

Sir,—Since my arrival in London I have seen, for the first time, Dr. Stevens's work on the Blood, and I cannot avoid expressing openly my astonishment at the freedom, to use a mild expression, of his comments upon my chemical investigations of that important fluid.

In prosecuting my laborious experiments upon the blood, I had no theories to serve, founded upon certain impressions in respect to its change of colour, whether by agency of salt and water or carbonic acid gas, well knowing that such experiments are anything but chemical analyses. Being in London (to attend a Committee of the House of Commons on the subject of accidents in coal-mines), after an absence of several years, I respectfully invite any chemist to refute by direct experiments anything that I have published in the pages of The Lancet upon the subject in question, and I will render every assistance in my power, in order that the *opprobrium medicorum* in respect to the exact nature of the animal fluids may be removed. If Dr. Stevens, who I understand resides in London, be inclined to make direct chemical analyses of the blood by which any of his theories may be supported, *which heretofore has not been the case*, I promise that I will attend and witness them, and be the first to acknowledge their value—if any value they may have.

It is a pity that such philosophers as Doctors Prout and Turner do not perform some experiments upon the blood, and discover the truth, whether it lie in the bottom of a porringer or in the "bottom of a well."

I do not intend to reply to any comments upon this communication except such comments are supported by direct and correct chemical experiments. I remain, Mr. Editor, your most obedient servant,

W. Reid Clanny.

Colonnade Hotel, Charles-st., St. James's, June 29, 1835.

NORTH LONDON HOSPITAL.

ACNE ROSACEA, SUCCESSFULLY TREATED WITH KREOSOTE.—EFFECT OF KREOSOTE ON VOMITING.

Anne Draper, aged 33, was admitted, Nov. 8, 1834, under the care of Dr. Elliotson. For seven years she has been subject to a red eruption of the face, presenting the following characters:—It commences with a sense of heat, and is shortly afterwards followed by the appearance of a small pimple, which enlarges, and becomes gradually yellowish, and when it breaks, discharges a yellow matter; it then dries up, no scab, but a little scurf remaining. She has been subject to headachs from the first appearance of the eruption. She complains, too, now, of a pain in the forehead, with a sense of tightness, which she also experiences under the eyes; she is particularly nervous, very thirsty in the morning, and subject to acid eructations. As there is a slight

inflammatory action going on in the system, twelve ounces of blood were ordered to be taken from the arm, and two grains of calomel administered every morning. Potato and bread diet.

15. The bleeding relieved the pain in the head and the heat of the face; the eruption is better, but she still has some eructations, which have made her throat feel sore. Two minims of hydrocyanic acid three times a day were ordered. To continue the calomel.

18. Acid eructations gone; the eruption looks a little paler. To continue the hydrocyanic acid, and omit the calomel.

Dec. 9. Some fresh eruptions appearing to-day, with a return of the sour eructations, Dr. Elliotson determined on trying the effects of kreosote, and ordered two minims of it three times a day. The effects were almost immediately apparent, the eruption being evidently diminished on the 11th.

18. Has been gradually improving since last report. She now takes twelve minims of the kreosote three times a day, having increased the dose gradually every two or three days.

Feb. 21. The eruption is still progressing towards a disappearance. She has complained occasionally of nausea, and has had sour eructations occasionally, but no vomiting. To have full diet.

April 14. She now takes twenty minims three times a day; the eruption is much less defined, as the medicine has caused a little giddiness, and also a trembling of the body. The dose to be diminished to fifteen minims.

May 21. She has continued the medicine in the same doses since last report. To-day, as she complained of excessive weakness, the medicine was discontinued. The tone of her stomach soon improved, and the eruption gradually diminished. She was discharged on the 2nd of June, the eruption being nearly gone.

On the 16th, Dr. Elliotson lectured on this case, the patient being present. The eruption is scarcely perceptible. She says she has never been so well for seven years; she feels quite strong, and has a good appetite. Dr. Elliotson said that he considered that the favourable change in the disease had been entirely effected by the medicine, as the improvement commenced so soon after the first employment of the kreosote, and had proceeded steadily and gradually. He thought at first that some portion of the favourable change might have been caused by her living low; but, to be satisfied on that point, he had ordered her full diet on the 21st of February, and since that time the improvement continued to be as evident as before. It was worthy of notice, that the dyspepsia had also been removed by the kreosote, which he considered to be a most valuable medicine in that affection, when no inflammatory tendency existed. He had used it with great success in obstinate vomiting caused by constipation of the bowels; the first dose, in some cases, immediately relieving the complaint. He had also successfully employed it in a case of hysterical vomiting, in which prussic acid had lost its effect. In that case there was no inflammation, no constipation, but the mind was evidently affected. It was not, however, to be supposed, that kreosote was an infallible remedy for vomiting. A delicate boy was lately in the hospital, who had vomited every thing for a considerable time, without any apparent cause. About five years before he had had jaundice, and four years since, a considerable quantity of red gravel was voided with his urine. For this affection he was placed under the care of a surgeon, and relieved, but the vomiting came on immediately. However, he never vomited except after taking either food or drink, but then the ingesta were thrown up either directly or in five minutes afterwards, apparently unaltered and undiminished in quantity, though of course some portion must have remained to support life. He had been under the care both of Dr. Ashburner and Dr. Hawkins, the latter of whom had given him lime-water in large quantities, which appeared at first to relieve the complaint, but which soon lost its effect. Another gentleman had administered small doses of kreosote to him, but with little benefit. On his admission his head was affected, he felt giddy, and there was knitting of the brows. Thirty doses of kreosote, of three drops each, were given him daily, but all were vomited almost as soon as taken. He (Dr. E.) had intended to give four drops thirty times a day, but the boy wanted to go home, and so left the hospital. No injurious effects attended the large quantities of the medicine which were given.

WOUND OF THE CALF.—OBSTINATE AND PROFUSE HEMORRHAGE. — LIGATURE OF THE POSTERIOR TIBIAL AND POPLITEAL ARTERIES.

Thomas Sharp, aged fifteen, was admitted May 2nd under the care of Mr. Cooper. Whilst cleaning a window he fell, when his leg went through one of the lower panes, and was severely cut. The gastrocnemius, solens, and long flexor of the toes, were divided as cleanly as if they had been cut through with a knife, and though, on the patient's arrival, the posterior tibial artery did not bleed, Mr.

Chandler, the house-surgeon, had no doubt, from the depth of the wound, and from the profuse loss of blood (amounting according to report to two quarts), which had occurred before the lad reached the hospital, that this artery was injured. The subsequent history of the case makes it probable that the fibular artery was likewise implicated in the wound. The wound was covered with linen wetted with cold water, and the limb was allowed to remain quiet for three hours, at the end of which time the house-surgeon proceeded to apply dressings; but a considerable hemorrhage interrupted the attempt, and it was found necessary to tie two large arterial branches.

May 3. The patient has passed a good night, and complains of little or no pain. The muscles of the calf were now relaxed, the sides of the wound were brought together with sutures, and cold water was again applied.

6. The sutures removed to-day, and as the wound is suppurating apply a poultice.

13. Has gone on well till to-day, when suddenly a profuse hemorrhage broke out, evidently from the posterior tibial artery. Fourteen ounces of blood were lost before assistance could be rendered. By introducing his finger deeply into the wound Mr. Chandler commanded the hemorrhage, which shortly afterwards ceased altogether. An opiate was now given, and the patient was carefully watched.

15. Hemorrhage took place again, and, if anything, was more rapid than on the previous occasions. The house-surgeon with some difficulty, owing to the thickened state of the parts, now took up the posterior tibial artery, and gave another opiate.

25. About five o'clock this afternoon (ten days after the application of the ligature to the posterior tibial) hemorrhage came on again, and twelve ounces of blood were lost; but, in consequence of the disorganized state of the parts, the point from which the blood came could not be detected. The bleeding having stopped spontaneously, a person was left with the patient to watch him.

26. Hemorrhage returned this afternoon at five o'clock; twelve ounces more blood were lost. Mr. Chandler now lengthened the wound upwards, and secured the posterior tibial higher up.

27. About ten o'clock this morning, hemorrhage came on again, apparently from the lower part of the wound; Mr. Cooper was sent for, and found the bleeding still going on when he arrived; but at about the middle of the wound in the calf there was a clot of blood, throbbing with considerable force. The second ligature was still on the posterior tibial. On the presumption that the bleeding might come from the lower orifice of that artery, Mr. Cooper made an incision behind the tibia, intending to secure that portion of the vessel. Scarcely, however, had a cut been made through the skin and fascia, than the hemorrhage re-commenced in the situation of the abovementioned clot, and from the profuseness and direction of the blood, it was immediately concluded that the bleeding was not from the lower portion of the posterior tibial artery. Mr. Cooper remarked, that of course if it came from the upper part of the artery, the ligature previously applied could not have included it; but the bleeding might come from the fibular artery, and he believed it did. In this uncertainty, and having to deal with a wound of considerable magnitude, already so much disturbed and irritated by a repetition of operations and manual proceedings as to threaten sloughing mischief, Mr. Cooper decided on taking up the popliteal artery, as the most likely means of saving the limb. Indeed, as he said, he thought that the best proceeding in order to preserve the patient's life, for so reduced was the patient by repeated losses of blood, that probably the next hemorrhage would have rendered his case hopeless. The vessel was secured in the usual manner, with very little difficulty, Mr. Cooper remarking that he should have tied the femoral artery for the suppression of such a hemorrhage from the tibial vessels, arising from a compound fracture, because placing the patient on his abdomen with a broken limb would be inconvenient; but in the foregoing case, he preferred tying the popliteal artery, because, at the moment he thought it most likely to command the hemorrhage. There has been no return of bleeding up to the 29th of June.

Mr. Cooper, in making some clinical remarks on this case, said,—There is occasionally great difficulty in ascertaining the source of the bleeding in wounds of this description, where it returns after a few days,—a doubt existing whether the blood issues from the posterior tibial or from the fibular artery. Both these arteries may be wounded together, but the hemorrhage from the fibular may not begin to be troublesome until a week or ten days after the accident, at a period when perhaps the posterior tibial has been already secured, and the ligature of the latter is having the effect of determining the blood in greater quantity into the other arteries of the leg. I should always recommend, in cases of wounds, the securing of every large artery that is injured, before the first dressings

are applied, and before inflammation has had time to come on. In the first instance, the requisite proceedings are easier to the surgeon and less painful to the patient than in a later stage, and the risk of further loss of blood is removed. Wounds of arteries of the fourth and fifth orders, like those of the fore-arm and leg, are followed by hemorrhage, which, after continuing a short time, will generally cease of itself, but breaks out again from time to time, until the patient is completely blanched from loss of blood, his feet becoming anasarcous, his pulse small and rapid, and his condition such, that the next recurrence of bleeding would certainly destroy him. In the present case, I think that the posterior tibial and fibular arteries were both implicated. The plan that was adopted of tying the popliteal artery was successful, but it must be confessed that securing the femoral artery will generally succeed likewise; for the experience of DUPUYTREN and DELPECH has established this important fact; that is to say, such operation will answer in an encouraging proportion of cases of hemorrhage from the arteries of the leg—the failures being but few. On one occasion, where the popliteal artery gave way after a gun-shot wound, I completely and permanently stopped the hemorrhage by tying the femoral artery.

KINNERTON-STREET SCHOOL.

EVERY variety of name has been given to a new medical school which has just been opened at Pimlico. The Brodean School, the Pimlico School, the St. George's New Rival School, the Kinnerton-street Theatre of Anatomy, and divers other names have been employed to entitle it. We take the name from its locality, for choice. Our readers will recognise its identity without difficulty.

This new place was opened to view on Wednesday last, when, from the profitless notoriety which it has lately obtained, the theatre was thronged with visitors. The object on this occasion being to advertise the establishment, a mummy was announced to be opened, as the gift to the school of Lord Frederick Fitzclarence. It was in fact, however, an old present to Mr. Keate, who was so good as to transfer the venerable corpse to the school to ensure the desired *eclat*. The hospital patrons of the school also exerted themselves to procure a large attendance of titled visitors, but without much success. The most eminent of the assembly were, the young Prince George of Cambridge; Mr. Duncombe, M. P.; Count D'Orsay, the dandy; George Wombwell, the roué; the donor; Miss Fanny Hawkins; the builder of the school, Sir Benjamin; Mr. Pettigrew, Mr. Keate, Mr. Cæsar, Drs. Babington, Gregory, and Sims, Colonel Keate, and the reporters for the press. Also Professor Coleman, Drs. Johnson and Somerville, Mr. Jerdan, and that distinguished Egyptian traveller, Wilkinson. The attendance of scientific men was next to none, if we except the foregoing, Mr. Clift, Mr. Owen, and the general practitioners whom Sir Benjamin directed to be invited as "subordinates." The rest of the assembly was composed of the able and respectable tradesmen of the neighbourhood, who took much interest in the curious process performed on the body of the mummy. It was whispered that Mr. Keate expected the crowned heads to be present, but their Majesties did not attend, unless it was in hats and plain clothes, and therefore incognito. Sir Henry also had *promised* that the Fellows of the College should be there, but, as usual, broke his word.

Nothing else which could be particularly called an "opening of the school" was done that we could see, and the honour and glory of spoiling the mummy was adroitly accrued by Mr. Pettigrew, who had "dropped in" with a "hope-I-don't-intrude," and took the affair out of the hands of the demonstrators, who ought to have performed the dissection. The fact is, that a friend raised a call of "Pettigrew," when Mr. P. politely stepped into the arena and relieved Messrs. TATUM and JOHNSTONE from farther trouble and all the honour. Thus have we seen an unwelcome parson walk into a drawing-room just as a parcel of happy girls were about to form a quadrille, and propose to the lady of the house that he should undertake the duty of family prayers, the disturbed but submissive party forthwith resigning their other duty with a cold shiver.

The mummy gave more than the usual trouble to Mr. P. and his assistants, and, after all, presented nothing singular to gratify the eye or the curiosity. It was pronounced to have come from Thebes, and to be the corpse of a lady of rank belonging to the Temple of Ammon. The outside case was varnished black and highly ornamented, and the swathing had been done with great care, in the usual manner, and surrounded with a hot bituminous fluid. The third or inner case was of sycamore wood, and covered with hieroglyphics, invocations to the Egyptian deities in favour of the deceased. All appearance of flesh was destroyod, and the

corpse looked like a skeleton dipped in pitch. On the chest, immersed in the bituminous mass, was a chain, with a charybæus or small green stone at the extremity. No papyri were found with the body.

An explanation of all these things occupied the intervals, and the meeting then separated.

Mr. P. stated that he cut a piece from a mummy three years ago, and boiled it, and that it soon after underwent decomposition like modern flesh.

SURGEONS IN THE MERCHANT SERVICE.

To the Editor of THE LANCET.

SIR,—Your journal has ever been open to all that relates to the interests of the younger part of the profession. Permit me, therefore, to draw the attention of the sea-going parties of the class to which I have alluded, to a matter affecting their pecuniary interests.

It has always been the custom of the Government to allow the surgeons of the merchant service 15*s.* for every soldier under their charge landed at the destined port. An attempt within this month has been made either by the Captains or the owners of certain free traders to India, to rob the surgeon of this his just reward for his careful and conscientious discharge of his duty to the troops. Several instances have come under my notice lately, where the shipowners, taking advantage of the unhappy circumstances of the candidates, have made it a "sine qua non" before appointing them to the ships, that they give up all or the greater part of the Government allowances for the charge of the troops, to be pocketed by the Captain or the wealthy shipowner, as they choose to arrange it. Is this fair? Is it honest? Is the poor young man, perhaps driven by hard necessity to close with the iniquitous proposal, to have all the trouble and responsibility attached to the medical charge of perhaps 400 soldiers, with a due proportion of women and children, and to receive no remuneration save the paltry sum (in no case exceeding five pounds per month) allowed by the owners for the charge of the ship's company? Convinced that this only wants publicity to be forthwith put a stop to, I remain, Mr. Editor, with much regard, your obedient servant,

A YOUNG SURGEON.

June 23, 1835.

ST. GEORGE'S HOSPITAL, June 25, Sir E. Smith in the Chair.—The examination of the laws was proceeded with to page 24, and concluded with the Chapter relating to the convalescent fund. As before, several clauses were altered, but nothing worthy of remark occurred, excepting in relation to clause 2, page 20, which referred to the Trustees, and elicited some discussion in consequence of its conferring on the weekly board the extraordinary power of authorizing the Trustees to sell out of the Stocks &c. the deposited funds of the hospital. An amendment was carried, limiting that power to permission to play with 300*l.* of the hospital money, and rendering it necessary to call a Special Court in case the parties want to finger a larger sum. Finding the sense of the meeting to be in favour of the amendment, Sir Benjamin made a speech on the subject, and with excessive candour admitted that although the weekly board was open to the attendance of every Governor, yet that it was, notoriously, sometimes very thinly attended, and, consequently, that a few interested persons might come down and suddenly dispose of the whole of the funds of the hospital in a very unconstitutional manner. In order, therefore, to restrain the power within a high moral scale, he thought that it ought to be limited to 300*l.* This was regarded by the weekly board as the unkindest hit of all, and it affords a hope, according to the ancient conundrum, that "honest men" will at last "come by their own," even in this quarter, for hitherto Sir Benjamin and the weekly board have been as thick as inkle weavers. The Court was ultimately adjourned to Friday the 3rd of July.

CORRESPONDENTS.

To the Editor.—Sir, your correspondent is mistaken in speaking of the two Mr. Johnsons, at the Kinnerton-street school, as the twin sons of Mrs. Johnson of Regent-street, whose husband is hatter to Sir Benjamin Brodie. Mr. H. J. Johnson *may* be the son of Mr. Johnson the hatter, but the other Mr. Johnson senior is the son of a brother editor, and is mentioned amongst his friends as one of the most extraordinary youths of the present day, a fact which I am sure it would be not less flattering to his own feelings than just to his remarkable talents if you were to take this opportunity of publicly announcing. I have the honour to be, Sir, your obedient servant,

July 1st, 1835. THOMAS T.

We have received, through the kindness of Drs. B. and S., a second letter, signed *A Governor of St. George's Hospital*; but though the sentiments which it contains coincide in many respects with our own, the language in which it is couched is so coarse and unprofessional, and the diction is so exceptionable, that we must decline giving it a place in our pages. It shall be forwarded to any other journal that the writer may wish.

Mr. G. S. R. may venture with great safety (with *success* is another question) to practise as he desires. None will meddle with him. He ought to do so without even the most distant liability to have the privilege disputed, and if he bides a time he will.

The pamphlet forwarded by *Dr. Cohen* shall be attentively perused.

A dinner was lately given at Anderton's Hotel, Fleet-street, to Mr. W. Meade, teacher of medicine in the Borough, by his pupils, as a mark of personal regard, and as a proof of the estimation in which the classes attending his prelections, held his exertions amongst them as an instructor. Fifty gentlemen attended the festival.

J. F.—Wednesday last was fixed as the day for going into Committee on Mr. Cripps's Coroner's Bill in the House of Commons, but in consequence of the pressure, not of other business, but of speeches on that evening, the proceeding was postponed to Tuesday next, when several amendments to the clauses will be proposed, one of them embracing the remuneration of medical men for time and evidence given at inquests.

Mr. D. can recover in a "*surgical case*," and should instantly make a "defendant" of the dishonest fellow. We are sorry for the mistake alluded to.

We advise *A Subscriber* to call first of all on the publisher in Gower Street. The answer there may be satisfactory.

The physician from the U. S. may not practise in London as an apothecary.

The report of the inquest at Bolton shall be examined next week.—*Dr. Babington's* communication shall be conned for publication.

The correspondent who has again written to us from the North, and whose letter was put into the London post-office (Brewer Street), must favour us with his name and address, in confidence.

We beg to acknowledge the receipt of *Mr. Hurst's* letter, and trust to be present at the presentation of the petition, which is placed in the very best hands.

We beg to decline the article on Animal Magnetism. Shall it be sent to the author?

Mr. Turner of Manchester is preparing for publication a work entitled "Researches on the organization, functions, and diseases of membranous secreting textures," with original plans, showing the inflections and continuity of membranes.

In the Press, Practical Observations on the Nature and Treatment of Nervous Diseases, with remarks on the Efficacy of Strychnine in the more obstinate Cases. By G. Russell Mart, M. R. C. S. L., late of H. M. Hospital Ship *Racoon*.

Erratum. — An awkward error occurred in the printed copy of the leader last week, page 425. In lines 11 and 12, the words "missionaries to foreign lands *direct the irreligious labours*," should have been printed "direct *their religious* labours" &c.

METEOROLOGICAL REPORT.

(*Extract from a Meteorological Journal kept at High Wycombe.*

Lat. 51° 37′ 44″ North, Long. 34° 45″ West.)

Days.	Thermometer.		Barometer.		Rain.	Wind.	Weather.
	Highest.	Lowest.	Highest.	Lowest.	Ins. Dcls.		
June 22	75.50	48.	29.62	29.44	0.325	W.	Fine Day; Rain in Night.
23	60.	40.50	29.48	29.45	—	W.	No Rain, but dull.
24	54.50	41.75	29.29	28 95	0.75	S.W.	Heavy Showers.
25	48.	38.	29.55	29.23	0.275	N.W.	Frequent Showers.
26	50.50	38 75	29.60	29.36	0.8125	E.	Frequent Showers in Evens.
27	58.50	35.50	29.9 2	29.69	—	W.	Fine.
28	62.50	42.50	29.97	29.95	—	W.	Fine.